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THE SERI

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THE SERI

By A. L. KROEBER, *University of California*

INTRODUCTION

The present paper is the first product of field studies made between January and March, 1930, in Arizona, Sonora, and Sinaloa, under a joint expedition of the Southwest Museum, Los Angeles, and the University of California. The financial contribution of the University was the gift of Mrs. Ethel W. Crocker. While the purpose of the trip was to define rather than solve problems, the following pages contain part of the positive observations obtained.

The Seri, who live on Tiburon Island, Sonora, in the Gulf of California, are often considered the wildest and most primitive tribe surviving in North America. They owe this repute partly to McGee's monograph about them, in the Seventeenth Annual Report of the Bureau of American Ethnology. It is easy to read between the lines of this description that McGee leaned toward a romantic and imaginative interpretation of the Seri. Also, his actual contacts with the people themselves were brief, and hampered by imperfect communication. Moreover, the Seri have been for three hundred years in contact with Spaniards and Mexicans, part of the time even under direct mission control. It therefore seems doubtful whether their backwardness could be the result wholly of preserved primitiveness, and may not rather be attributable to a recalcitrant degeneration. In order to answer this question, and to place Seri culture at least tentatively among the other tribal cultures of the Southwest instead of leaving it as an unexplained and lurid abnormality, a brief visit to them was undertaken.

The success of this visit was due wholly to Sr. Roberto Thomson of Hermosillo and Rancho San Rafael, who is now the Mexican Government's *Jefe de Vigilancia* for the Seris, and in effect what in the United States would be known as Indian Agent for the tribe. He has protected and befriended them, kept them in turn in bounds, and secured some governmental assistance for them, under which they are making a beginning of adaptation to the modern world. At any rate, the mutual raidings and killings have stopped, and the Seri, though still very suspicious of most of the neighboring settlers and of strangers, look upon Sr. Thomson as their protector and friend. Without his introduction and experience, many less data could have been collected in a longer stay.

The Seri now live wholly on Tiburon Island. I was with them six days, half of them on the island. This is about as long a time as McGee spent with them—all of it at the cattle ranch of Costa Rica. McGee also explored the island and its camps at some length, but without encountering any Seri, who eluded his party.

Inasmuch as Mr. Edward H. Davis of Mesa Grande, California, has three times visited Tiburon to form an ethnological collection for the Museum of the American Indian, Heye Foundation, I attempted no examination of Seri material or economic culture, which Mr.

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Davis has had fuller opportunity to investigate, but confined my attention to the social and religious sides of their life. There was the more reason for this since it is in dealing with these latter aspects, where verbal communications are as important as observation, that McGee's monograph is most tenuous and dubious. I also secured linguistic notes for the preliminary placing of the curious tonal speech of the Seri.

Seri culture in its present form is a fragmentary thing such as could hardly have existed under purely native conditions. Religion especially has suffered, no doubt under Christian influence, without many elements of Christianity having been taken over in exchange. Of mythology, only tatters seem to remain; of ritual, little more; only shamanism seems to be fairly well preserved. Nor, beyond the Spanish names for God and the cross, do the Seri give evidence of being or having been Catholics. The result is that they seem remarkably religionless. I do not know of a native people that appears so free from superstition and so unspiritual in its attitudes. Possibly I conferred with the wrong informants; but those I talked with seemed unsecretive. Social culture is better preserved, as is evident from a set of kinship terms that are numerous, precise, and untouched by Spanish concepts. On the other hand, there is little formal social organization. Whether this is also the result of a loss, is hard to say. The Seri may never have had sibs or clans; but the fact that they appear to lack them now is no positive evidence that they were without them three centuries ago. Shifts of residence, contraction of territory, shrinkage of numbers, amalgamation of distinct bands, may well have obliterated much of such social fabric as they once possessed. Games and the calendar are wholly native and intact, but taboos connected with sex, age, food, and the like seem fewer than among the backward tribes of the southwestern United States. It seems reasonable to construe this condition as the result of varyingly hostile, parasitic, and missionizing Spanish-Mexican contacts; especially when one realizes how overwhelmingly, though also spottily, this influence has affected the other tribes of Sonora—the Yaqui, Mayo, Pima, and Opata.

Historically the Seri are not a tribe but the consolidated remnant of a series of dialectically distinct tribes that once held the barren coast of Sonora from Guaymas to Puerto Libertad. Tiburon Island is the stronghold in which the mixed survivors, probably now numbering less than 200, have taken refuge, and, owing to its inaccessibility, drought, and poverty, have succeeded in maintaining themselves and their blended and reduced culture. Toward the interior, it is doubtful if they ranged beyond the present line of the Southern Pacific railroad, if that far. Orozco y Berra indeed assigns them territory up the Sonora River to Ures, on his famous map, which is still basic to all other ethnic maps of Mexico. But from Hermosillo

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to Ures is good farming country, and why the only non-agricultural people in Sonora should have held this stretch, is hard to see. Moreover, Orozco's bringing the Serian tribes so far inland as to abut on the Opata, severs the continuity of the American Pima Alto and Papago with the Mexican Pima Bajo, whose speech is almost identical. This identity is best understood as the reflection of a continuous occupation by the Pima of the whole foothill country from the Gila to the Mayo, between the Serian desert lowlanders and the Opata in their mountain valleys, with the Yaqui, Mayo, and other Cahita peoples replacing the Serians south of Guaymas where heavier rainfall and large flowing rivers made the lowlands attractive to farming peoples. The natural inland frontier of the Seri along the Sonora River would have been at the Siete Cerros, a low range some 25 miles, more or less, west of Hermosillo, where grass ends and creosote bush and giant sahuaro cactus soon become dominant beside mesquite. This boundary would have put the farmers on farm land, the roving gatherers into the succulently overgrown desert and along the food-stocked coast.

The Seri, then, in the wider sense, including the Guaymas, Tepocas, etc., were anomalous among the native peoples of Sonora in habitat as well as in culture. Now a similar country, almost waterless and cactus dominated, is the central segment of Mexican California. Here lived the Cochimi, dialectically the most divergent of the Yuman peoples, and with a culture similar to that of the Seri at least in its level. The habitat enforced a similar subsistence economy, unsettled living, scattering of population, inability of serious accumulation of property, and hence no doubt a relative paucity of most organizational aspects of culture. Whether the content of Cochimi culture was equally similar is difficult to say because of the melting away of the people. At any rate the question arises whether Cochimi and Seri are not historically connected, especially as both their languages are related to Yuman, whereas all other Sonora tribes are Uto-Aztecans. The connection seems the more possible in that southwest of Tiburon lies San Esteban Island; beyond that, San Lorenzo; and beyond, the great peninsula. The open-water distance nowhere exceeds fifteen miles. This is a difficult but not impossible gap to cross on cane rafts; and the Seri have skilful knowledge of currents and winds. The passage across the Infiernillo between mainland and Tiburon is little more than a mile at the narrowest point, but they often paddle five in their open boats to take advantage of weather conditions. The Seri remember navigating to San Esteban, and there is historical mention of crossings of the Gulf.

The final evidence for or against derivation of the Seri from Baja California will probably be linguistic, and if, as seems possible though doubtful, Cochimi speech can still be recorded in the peninsula, the answer may be definitive. The materials at present available

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are inconclusive. Some of the outstanding speech similarities and differences are given in a section of the present paper; a fuller presentation will be made in a subsequent classification of the Yuman languages.

The Yuman tribes of the United States are better known, and there are published or collected accounts of the Dieguefio, Kamia, Cocopa, Yuma, Mohave, Maricopa-Halchidhoma, Yavapai, Walapai, and Havasupai. These fall into two groups, culturally: the farming tribes of the Colorado (and Gila) bottomlands, and the gathering tribes of the desert and semi-desert of Arizona and southern California, the latter again affiliating with those of northern Baja California, such as the Kiliwa and Akwa'ala-Paipai. As might be expected, it is the desert Yumans of Arizona who show the greater number of resemblances to the Seri and fewest differences.

The Pima as the immediate neighbors of the Seri, and the Opata and Cahita tribes beyond, ought to show many similarities with the Seri, plus differences due to their agriculture and activities like weaving which are normally encouraged by sedentary habits.

Such are some of the indications as to the history of the Seri and their culture, as discussed more in detail below so far as the preliminary data available allow. Further and intensive investigation is obviously needed. On the side of material life, Mr. Davis' studies ought largely to fill the need. For social and spiritual culture, the work will be difficult. It is not that the Seri are unwilling, but that they are inaccessible and hard to communicate with. The obvious procedure would be a study of their speech until it served as a medium. In that way both their language and their culture could be recorded hand in hand. But the obstacles are numerous. The island is thirty miles long by twenty wide. There is not a roof on it. The six summer months are extremely hot, and, along the coast, said to be almost insufferable from gnats and mosquitoes. Most of the few water holes are inland; the Seri live, except during the cactus and mesquite harvest, scattered in small settlements along the shore, often several miles from water. There is no communication across the strait, except by open boat, subject to weather conditions; and then it is twenty miles to the nearest house and a hundred to a town. Life on the island would be both harsh and monotonous to an unusual degree. Nor can the Seri as yet be studied by taking one or two of them to civilization for a prolonged stay. They soon become restless and homesick. Added to all this is the fact that their Spanish, though reasonably fluent in some cases, is ungrammatical, and would hardly serve for securing paradigms or accurate translations of texts; and while able to endure hardships, the people are not accustomed to steady work or mental concentration. The difficulties would not be insuperable, when the destined linguist-ethnologist undertakes the task; but he should not under-rate them.

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NEW DATA

Informants' Attitude

Most of my information was obtained from Chico Romero, the present official chief, a man of about 38. Santo Blanco and one or two other men contributed occasionally. Sr. Thomson was present most of the time and aided materially, both in encouraging the Seri and in helping to formulate questions suitably to their experience and comprehension. For instance, he repeatedly cleared up points in the kinship system by applying his knowledge of the actual relationship of Seri individuals, or their acquaintance with his relatives, to frame concrete cases, real or hypothetical, for which a denomination was then readily given. Without this aid, the system could not have been obtained with either reasonable surety or correctness. So far as possible, direct questions were replaced by giving to the Seri accounts of customs attributed to the Cocopa, of whose existence they know, and suggesting comparisons, in which they proved interested. On the whole, their attitude was friendly, coöperative, and appeared unsecretive. Concealment may be so automatic a habit with them that they practice it without giving a sign; but I had the constant impression that they told little about their religion because they knew little, and not from any skilfully concealed reluctance. Still, all negative statements must be regarded as only tentative when secured in a brief time through an imperfect medium of communication from informants not accustomed to mental exertion.

Historical Tradition

There were formerly four tribes, according to the informant: to the East, the Seris, at Pueblo de los Seris (the ex-mission, across the river from Hermosillo); to the West, the Tiburones, on the island; to the North, at Tepoca, the Xeka'aikö'ye; to the South, at Tastiota, the Antepkê'ituX or Tastioteños. Too many died at Pueblo Seris, so they joined the Tiburones. They fought the northern and southern groups. Sixty (or 68) Seri-Tiburones once went to Tepoca to kill a man and his two sons. They made marks and stuck a knife in the trail to cause them to stop. Then they shot them. The women and children were captured, taken to the island and kept, the women first being abused by the whole party. The informant's son José Manuel (13) had a Tepoca maternal grandmother; that is, the informant, now about 38, married the daughter of a Tepoca woman. (This would put the incident hardly earlier than 1860 or later than 1890.) Similarly, there is Tastioteño blood among the present Seri. The dialects of the several tribes are said to have been distinct, though allied.

It is evident that these memories cover only the last part of the period of Spanish contacts.

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Society

583 Marriage is monogamous. The wife is bought, in spite of the
[595] poverty of the Seri. Santa Blanco paid 150 pesos in property for his wife. Chico Romero, a widower, paid more for his, a widow, "because she had three daughters, and a family with daughters is rich" (in expectation of bride prices).

591 The wife goes to live with the husband. A young couple lives
562 with the young man's parents, perhaps in an annex to the house. "The man commands." Chico was emphatic on this point, and repeated that when his son married he would live with him, not with the girl's relatives. Both he and Santo have step-sons-in-law as well as daughters-in-law living with them, but this is because they are chief and boat-owner respectively; (and the sons-in-law are young).

833 Copulation was said to take place immediately on marriage.
McGee's statement of a period of continence being cited as the custom of a foreign tribe, the informant obviously wondered and laughed.
[813] Intercourse goes on during pregnancy; but not for some months after birth, for fear of a new pregnancy, which would be injurious to the child. A good man respects his wife at all times and does not constantly pursue her.

144 No half-breeds were seen, and the Seri declare they are free of
164 venereal disease.

551 Nothing could be elicited from the informant as to anything like
614 the group-inherited names of lineages, or clans, of the Yuman tribes.

768 When a woman dies, the widower may give the children to his dead wife's parents to raise. This is the only item learned that might point to McGee's "matriarchate"; but the informant may have been thinking of particular cases. His son lives with him, though he lost the boy's mother.

582 Cross-cousin marriage is as prohibited as that of parallel cousins.
This is in accord with the sibling terminology for all cousins; but in view of the present small number of the tribe, the rule must work difficulty.

[587] A man does not marry his dead wife's sister. Apparently he may not. Nor is there levirate. The informant volunteered the question if marriage with step-daughters was permitted by other peoples. Being told of the Navaho custom, he seemed shocked.

606 Neither husband nor wife looks at or addresses either parent-
183 in-law. In the isolated, small-group life of the Seri, this rule can hardly be adhered to with complete rigor, and its conspicuous carrying out was not observed; but then everything in their behavior is casual, informal, and slovenly.

607 The kinship system as recorded contains a note as to a woman
not addressing her younger sister's husband by kinship term except

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in endearment when drunk. This may apply also to other siblings-in-law. 607

Younger siblings (? and other relatives) may say nothing obscene before the older, out of respect for them; but the older talk freely before the younger. This applies to both men and women. Otherwise there seems to be little prudery; the informant recited the names of the private parts before his wife and children, and she indifferently repeated them after him in confirmation. 593 834

There is no teknonymy. 551

The dead are buried. Cremation of the body seemed unknown to the informant. All property of the dead person is burned or destroyed. His balsa was burned; modern boats are not, because they "belong to the government," which furnishes the lumber. The house is abandoned and a new one built a short distance away. The name of the dead is not spoken. 76 [422]

Kinship

The Seri kinship system is distinguished by three general features: the large number of terms; the strong tendency to terms reciprocal in meaning; and the distinction made between older and younger siblings of nearer relatives if they are of the same sex. All of these are characteristic Yuman traits. 601

The number of terms obtained is 50; which number might have been increased if step-relatives, great-grandparents, great-uncle-aunts, siblings of siblings-in-law, spouses of uncles-aunts, and spouses had been inquired for. However, the informant seemed to feel that the list was exhausted with the set obtained; before that, he pursued the subject of his own accord. Fifty is an unusually large number of kinship names in any language; the more so, since there are no cousin terms. The 12 siblings-in-law terms—a quite extraordinary number—swell the total.

Conceptually reciprocal terms dominate the system except in the sibling class. The informant soon realized this principle. Some of the reciprocals are derivatives; others are not; self-reciprocals are lacking. This last fact helps increase the size of the system.

The distinction between older and younger siblings of the same (but not of the opposite) sex as nearer relatives is consistently carried out for uncles-aunts and spouses' siblings (or siblings' spouses).

ẩi	father	reciprocals ísâ'k	(man's son), ẩq (man's daughter)
o'l·a	mother	rec. íq'l	(woman's child)
o'p·ke	father's father	rec. ík-o'pke	(man's son's child)
omẩo	father's mother	rec. oka'nak	(woman's son's chd.)
ẩ'ẩo	mother's father	rec. íqẩei	(man's dtr.'s child)
ẩit	mother's mother	rec. íqaq	(woman's dtr.'s chd.)

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eske	**older brother (of man or woman)**		
eXa"s	**younger brother (of man or woman?)**		
i'q·ðe	**younger brother of woman**	**rec. 'ipák**	**(older sister of man)**
huya'k	**younger brother (reference, not address?)**		
emya'k	**younger brother (term of endearment, cuando contento)**		
ekð'me	**younger sister (of man)**		
etke	**older sister of woman**	**rec. ica'k**	**(yngr. sister of w.)**
ema"ðx	**father's older brother**	**rec. ek-ma"ñ(x)**	**(man's y. br.'s child)**
e'ite	**father's younger br.**	**rec. ekð'tae (ekð'pae?)**	**(man's o. br.'s child)**
a'yak	**father's sister**	**rec. icôk**	**(woman's br.'s child)**
etma"ðx	**mother's older sister**	**rec. eixema"ñ(x)**	**(woman's y. sis. ch.)**
ista'k	**mother's younger sis.**	**rec. epxac**	**(woman's o. sis. ch.)**
exak	**mother's brother**	**rec. e"ak**	**(man's sister's child)**

All cousins, cross and parallel, are said to be brothers and sisters. The cases used as tests did not suffice to determine whether the names used depend on the respective ages of the cousins or of their parents.

eqôqt	**man's parent-in-law**	**rec. iqaqa'm**	**(son-in-law)**
iqe·pôc	**woman's father in law**	**rec. iqa'mãc**	**(daughter-in-law)**
iqêmêc	**woman's mother in law**		
iqe'mut	**wife's brother**	**rec. eqtoñqwa'l**	**(man's sis. husband)**
eqmaXê'te	**wife's older sister**	**rec. etmaXêm***	**(wom. y. sis.'s husb.)**
ika'ite	**wife's younger sister**	**rec. imaqe'te**	**(wom. o. sis.'s husb.)**
eqwaq	**husband's sister**	**rec. ikôk**	**(wom.'s br.'s wife)**
iqma"aX	**hus.'s older brother**	**rec. eqmaXôt**	**(man's y. br.'s wife)**
iqê'ite	**hus.'s younger brother**	**rec. iqe'tae ha'ta**	**(man's o. br.'s wife)**

* Term of endearment, when drunk; otherwise they do not speak.

171
601

There is no word for child's parent-in-law (consuegro).

That a man distinguishes his son and daughter but a woman calls them by a single term, is a Yuman trait.

The number of sibling terms is greater than among the Yumans. The Diegueño-Kamia agree with the majority of Californian tribes in having four terms: older and younger brother and sister. The Yuma and Mohave have three, older siblings being merged; the Papago, two.

Six uncle-aunt terms, allotted as among the Seri, prevail through southern California, including the Yuman tribes; also among Walapai-

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Havasupai. This therefore looks like a trait of Yuman origin. The Papago go further, with eight terms. 191 60

The Seri habit of calling cross cousins siblings prevails through central and northern California alongside the trait of designating them by uncle-nephew terms. All southern California, including the Yuman tribes, has special cross cousin terms. The Walapai-Havasupai combine the last two methods.

As compared with the three Seri parent-in-law terms, the California Yumans have two, the Walapai-Havasupai one. The twelve Seri sibling-in-law terms are most nearly approached in California by the Yuman Kamia, with seven. The Yuma have five; the Mohave, like the majority of Californian tribes, three. The Walapai-Havasupai, like the Hopi and apparently the Pima-Papago, have reduced separate terms for both siblings-in-law and children-in-law to very few.

Calendar and Astronomy

One informant said there were 12 moons in the year; another, 6. The list obtained consists of 12. Of these, about 6 refer to seasonal events, especially those concerned with food; 6 to constellations. This type of calendar resembles that of the Walapai-Havasupai. 805 821

1. June, ehe'naaX hi'oaX, mesquite ripe.
2. July, aatte'ka hi'oaX, grass green, ruben.
3. August, aaxwe'naa, or aaxwe'naa. (cf. 7), (certain stars) not yet visible (before dawn); tuuna.
4. September, hi'ka-ya'a, (stars of that name) appear; cold begins.
5. October, e'-ya'a, constellation Jacknife (?) rises in morning.
6. November, aa'yXa-ya'a, constellation hamaxi (aa'yXa) appears (in morning).
7. December, xaaxXaa'naa. aa'a (cf. 3; verified) (certain stars) not yet visible.
8. January, hoya.Xaa'k, certain stars just begin to show; small sea-turtles appear.
9. February, hoya.Xa'ka, larger turtles appear.
10. March, eXaa'kaa'i hi'oaX, sub-genus sea-weed (xaa'ka) "appears." See below.
11. April, hpi'taaa hi'oaX, shorter (a'ipit) cease.
12. May, aaa'aaaa hi'oaX, pitahaya ripe (aaa'a was given as ripe fruit of saharora, pitahaya, etc.)

Some of these names appear to be merely connotive of the events to which they refer. The seasonal happenings would probably be more truly placed if the calendar fell a fortnight to a month later, beginning in June-July or July instead of June. This would put the beginning at about the summer solstice, and might account for the statement that the "year" had six moons. The list was recorded on

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February 28, 1930, which the informant (correctly) declared to be the first of a new moon. He also said it was eXno'lasn't, with which he began his list. This would roughly equate moon 10 with March, as per the list; but when asked about the edible "seeds" of the eelgrass, he stated that these were due next month.

Unfortunately, the informant who stated that there were six "months" in the year was not questioned further. He may have referred to a calendar of six seasons like that of the Lower Californians.

The upper large star in Orion (Betelgeuze) is an antelope; the three of the belt, mountain-sheep; the three of the hilt, an arrow; Sirius, a dog following the sheep.

The Pleiades, kmă'mk, are a woman (xmâm, kmâm) with children, who came outdoors to urinate.

Ursa Major is a sahuaro or pitahaya fruit-gathering crook, a pole with a bar diagonally across the end.

Kwe'pitnX, quail (*codorniz*, qwe'pt) is a constellation.

Suxmi'ka, a man carrying a harpoon (*lanza*), may be Scorpio.

There are constellations Jackrabbit (ë'), Buzzard (nă'pXe), and kë'to, according to the calendar. These rise before dawn about March 1. Clouded skies prevented their being seen several mornings. A few days later, at 6 a. m. (7 a. m. Mexican time), Altair was visible well above the horizon; this may be Buzzard — compare Luiseño Buzzard-Altair.

Polaris was pointed out in answer to the question if there was a star that did not move.

The sickle of Leo was not recognized (Walapai-Havasupai, hand).

Of these, Orion-Mountain-sheep, Ursa-crook, Pole-carrier-Scorpio (?), Buzzard-Altair occur among Yuman tribes as far away as Diegueño, Walapai, Havasupai.

Myth Fragments

1.

People were born in a cane, the Seri in one joint, the Mexicans, Americans, Chinese in others, separate from each other. God (Dios, Yos) came along here from south, then went east (?), setting signal smokes; the Seri alone did not come to him, therefore have nothing.

2.

Coyote was trying to catch ducks. As he jumped, they flew away and he landed in the moon, where he is visible now.

3.

Death was caused by Coyote and Kontë'tXiat (*pinacate*, an insect that stinks, turns his black belly up, dung-beetle?). Coyote

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wanted people to die so he could eat their bodies; Pinacate because men stepped on him. Then Coyote killed his own son (daughter?), and people began to die. 539

4.

Fire is from the fly, who made it by rubbing his hands together, as he still does (*fide* R. Thomson).

5.

A man wanted to find the house of "Dios," who was the Sun. He went to ask Moon. Moon sent him on, but he could not find it, and returned. Moon played the musical bow (kăpʔxa"ĕt) to call all the birds, but they could not tell him. He played again and one more came, CaXa'pniX ke"ĕt, a little duck, who took the man and showed him the way, in a field, with the house in a corner, and showed him the door. The man went in. Sun had a pretty daughter. The man wanted to marry her, she was willing, but Sun would not allow it. He played (cards!) with the man, for each other's bodies. Sun won. He kept the man in his house. But in the morning when Sun went his rounds, the man escaped with the girl into the brush.

Of these tales, the first, except for the cane concept, is a rationalization, evidently post-Caucasian; the third probably finds its nearest analogues in central California; the fourth and fifth are characteristic of the Yuman tribes and southern California Shoshoneans.

Episodes apparently unknown to the Seri of today are: earth diving; frog eating the excrement of the god who dies; vagina dentata.

Shamanism

A "doctor" or shaman, kŏ'tĕ, becomes such by going to a "cave" in the mountains. This is solid rock, but he paints a sign or mark on it, it opens, and he enters. The "santo" or spirit inside, seakotkme'k ve, "going about in the brush," may or may not help him; if so, he strikes the man and enters his body. Through this the shaman can cure; because of the spirit in him, he can see the cause of the disease in a patient's body, "as if he had spectacles on." The spirit is not visible to others, nor does he talk from the shaman's body. 756

The shaman cures by putting his hands on the sick part; he circles them like a tube, puts his mouth on them, and says cho, cho, cho. He does not suck out any object. The informant was startled when told how grasshoppers, etc. were extracted by sucking shamans elsewhere; he volunteered later that the idea frightened him. There is no special treatment for rattlesnake bite. [755]

Most old men have more or less shamanistic power.

A shaman is paid a knife, a bow, four arrows, five pesos, or any such amount for curing. Killing of unsuccessful shamans was denied.

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789 Some shamans display their ability to hold live coals in their mouth.

Taboos

[88] 784 At first menstruation, the girl eats nothing (!) for 8 days, only drinking water. For 4 nights a *fiesta* is held for her, men and women dancing in a circle, anti-sunwise. She is outside the ring. Her head is not covered. San-pit roasting was unknown to the informant.

[841] At menstruation a woman drinks hot water. She may cook for others. She may not eat deer meat.

[844] After childbirth, both husband and wife eat only *atole* (gruel) and water, he for 4, she for 8 days. She may not work at all, he only a little, such as getting wood, "hunting" as necessary, etc.

[881] There is no puberty ceremony for boys. Nothing is said to be [224] known of any rule forbidding a boy to eat of the first game killed by him.

[833] Continence before hunting deer was not observed. Nor was there any special treatment or respect due the deer carcass. It is said that deer meat could not be left behind unless there was too much, but this is probably a statement of practise rather than a taboo.

Dances

535 [727] Besides the girl's puberty dance, the Seri also had a scalp dance. Only the frontal piece of the scalp was used. This was hung on a pole. Men (armed) and women danced together around it. If the scalp fell down, all would die.

Dances seen were solo on a plank laid over a shallow pit. Several singers sat by, beating or rattling anything convenient. Each song and dance lasted scarcely three minutes. The tempo is fast. The step is a quick double shuffle with alternate feet. In one type, the dancer held to a stick with one hand, his body and hanging arm remaining as motionless as possible. Another type was without the stick, the dancer holding a gourd rattle and keeping his body bent forward somewhat.

534 171 Rattles are of gourds, e'Xéc, on a stick, or of cocoons, Xekaké'mta. Deer-hoof rattles were denied. The cocoons are on a band worn below the knee. The Yaqui-Mayo wear such knee-bands of cocoons; and sometimes of deer-hoofs. The Gila Pima also know the cocoon band.

Various Religious Items

276 Datura (toloache, jimsonweed) does not appear to have been used. Even the plant seems unknown, although it is said to occur in the Seri range.

778 789 Rain making seems to be by amulet rather than by direct shamanistic power. For instance, Antonio Herrera wears a small object

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on a string around his neck, which he got from his father. It is a two inch length of cane, with a wooden stopper, containing a white powder of stone (?). A little of this powder put into fresh water, brings dew; into salt water, rain. 778 789

Similarly, Chico Romero wears on his neck a tiny spool-shaped object of wood, scarcely 2 cm. long, with notched ends. When he dies, this will burst; or rather, it seems that a larger object of the same shape, which another man keeps, will burst with thunder.

To get luck, a man paints a "cross" on his forehead, breast, and "bed" and goes to sleep. Then a dream comes in which he gets what he is thinking of. Sometimes the dream comes true; sometimes not. Some dreams are lies. 787

The soul (*alma*), he'ë'sax, is all over the body and is noiseless. It is "nearly the same as blood": when the blood is lost, the soul goes. Some say that when the Seri die they are reborn in the north as Cocopa. 774 775

There seem to be no special beliefs or practises about twins. 845

Antiso'ma (— Montezuma?) is the size of a child, has a beard, a golden staff, white clothes inside and black outside. He lives in a cave. Once he tried to take a young man away with him in order to dress him nicely. Later the young man's relatives went with him to find Antiso'ma again, but could not. 776

Songs

Toad was a woman who had only a breech-clout and wanted a cotton shirt. She said she would give herself to a man for one. 533

Coyote was a Seri once.

Pinacate (dung-beetle?) wanted a bride and was jealous about her.

Colaprieta, the black-bellied ant, also was a man and wanted to marry the holo'ctim ant. He was making a house of grass for her. She was afraid of him, and her relatives took her away.

Games

The four-tube-hiding game is played with canes open at one end. These canes are: blackened all over, old man; unpainted, old woman; blackened at one end, boy; blackened in the middle, girl. The boy and girl are made by slitting off slivers on two sides. The names serve as designations only; the differences between the tubes do not enter into the game. The player with the tubes turns around, puts a piece of twig into one, fills them all with sand, and throws them before his opponent, who tries to empty the twig from the *third* tube he selects. If so, he wins the canes, that *is*, the right to play. If the twig is in the first tube emptied, he loses 10; if in the second, 6; if in the fourth, 4. Counters are little natural shell disks. 524

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524 Dice are three splints of cane; tapering toward both ends, nearly flat. The concave inside is greenish white, the outside darker. The count is: 0 insides up, win 4; 1 inside up, win 1; 2 insides up, lose 1 and play; 3 insides up, lose 4. The 3 splints are stacked together, then thrown endwise against the palm, a piece of turtle shell, or anything similar, so as to fly forward and scatter on the ground. (Some players probably acquire a degree of skill in making the canes fall right.) A player repeats until he throws 2 whites or insides. For points scored, he draws lines on the ground in front of himself. His opponent erases his lines as he wins, or adds to them as he loses, until he himself is ahead, when he begins to mark his own lines. Ten points wins the game. A stick is then set in the ground by the winner, who goes on playing the next game. That is, if he has 8, and throws 4, he sets up his stick, erases 6 lines so as to start the new game with a credit of 2, and throws again. The Seri perform these additions and subtractions with the rapidity of a practiced white man.

A ring of people may play at once. Their scoring in relation to one another was not ascertained, but it is presumably each from his neighbor, with the totals shown by sticks.

Since with fair throws the losses in this game must equal gains, a lead of 10 over an opponent is as much as could expectably be played for if the game were not to be unduly protracted.

526 Football race is played with *palo fierro* balls, perhaps 3 inches in diameter, one to each side of 4 runners. The ball may be moved only with the foot. The race is along the beach, where cactus and brush do not interfere. The distance, according to places named to Sr. Thomson and known to him, is about 6 miles. The men on a side relieve each other in informal relays; usually only 1 or 2 finish. The [648] Seri once went north to play the Papago this game, but lost.

Shinny is a woman's game, preliminary to the football race. Four women to a side carry sticks with which they try to throw an 8-12 inch hoop to a goal mark at the end of a short field. Behind each side stand the 4 men runners who are to race with a ball.

Notes on Material Culture

482 Women carry loads on their heads with a ring: men with the pén, Spanish *palanca* or lever, a stick over the shoulder, with load [171] hung from each end. These are the usual Sonora and Sinaloa Indian ways of carrying.

516 The Seri sit and lounge randomly. The men squat, occasionally cross the legs, put them sidewise, or sit with one knee up. The women wear long cloth skirts, but apparently sit just as variously.

714 Body armor, *naitanikap*, with sleeves and helmet, and a shield. *saXe'tiX*, both of hide, were worn. The shield was described as 4 or 5 feet high, roof-shaped toward the front. It is not clear whether

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it was set up by an archer in front of himself, or carried for him by another man. At any rate it suggests open fighting besides raids and ambushes. 714

Pottery, which is thin, porous, and reddish-buff to gray, was not seen made. The clay is said to be tempered with jackrabbit or horse dung. The vessel is started, apparently by coiling, in a dish or receptacle. It is certainly built up by coiling, the sausages being somewhat less than the thickness of a finger. It dries fast, the bottom becoming somewhat hard as the top is being built. The coils are smoothed as they are added, with a stone inside, a shell to scrape the outside. A paddle is not used. The vessel is further smoothed with the stone and dried for a day. It is fired with wood, sufficient manure being unavailable on the island. 323 [372]

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McGEE ON THE SERI

The pages that follow deal with McGee's well-known monograph on the Seri,[1] discussing first points on which his data are fuller or mine confirm or modify his, and then points on which I believe him to have been in error or to have misconstrued his observations. McGee spent little more time in actual contact with the Seri than I did.[2] His work impresses me as that of an extraordinarily good observer, keen in seeing significant evidence, but of uncontrolled imagination and unconscious of his preconceptions. It is only fair to state that where he founds an interpretation on slender or uncertain data, he generally indicates the fact to a careful reader.

Data and Discussion

The ratio of kilogram weight to liter capacity of water jars is given by McGee (p. 183) as follows: 2 Seri, .126-.147; 2 Papago, .239-.279; 4 modern Pueblo, .252-.295. There is no doubt that the Seri olla is unusually thin-walled. Sherds seen at a campsite near San Rafael, on the dry course of the Bacuachi, 20 or more miles from the coast, ran from 2 to 5.5 millimeters in thickness, averaging 3.8; their curvature was slight, indicating large vessels. McGee remarks (p. 184) that the purpose of nearly all Seri pottery is to hold or transport water, other uses being secondary, generally after breakage. My observations on the island confirm this.

Head loads are carried on a ring of "yucca" fiber (p. 184).

The carrying stick or yoke, with nets to hold ollas, is considered aboriginal by McGee (p. 184), although he mentions (p. 68) that Ugarte in 1721 saw the device in use by men, the women carrying single ollas, presumably on their heads. Nordenskiöld has recently shown the "coolie yoke" to be ancient in the area.[3] It is used today in Sinaloa and Sonora.

McGee (pp. 11, 191, 292) thought that he understood that the "Ancient of Pelicans" was the chief creative deity and brought up the islands and earth with the help of the Turtle or Shark. This

[1] W J McGee, The Seri Indians, BAE-R 17, part 1, pp. 1-129, 139*-344*, 1898. (In citations of the higher page numbers, the asterisk is omitted.)

[2] McGee (pp. 13, 98, 291) in 1894 spent "about a week" at Costa Rica west of Hermosillo where some 40 Seri were temporarily congregated, his principal informants being sub-chief Mashém who spoke Spanish, and Juana Maria. A Spanish-English interpreter is referred to. In 1895 the coast and Tiburon Island were visited, camps examined, but not a single Seri encountered. The vocabulary was obtained chiefly at Hermosillo from Kohauis, an old Seri official interpreter who had left the island in childhood, never revisited it, considered himself an outlaw in Seri eyes, and had long had no dealings with them except under Mexican protection. I spent six days or parts of days with Seri, sleeping two nights on Punta San Miguel and three in the ranchería on the island opposite. Two Seri accompanied us back to Hermosillo to draw their government stipends, and were available for some supplementary questioning and revision of notes on the two following days.

[3] Comparative Ethnographical Studies, No. 9, 234, 1930.

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sounds like an expectable enough mythic idea, but seems involved with McGee's dubious conceptions as to totemism, discussed below. 114 193

The two-pointed fish-spear, with serrated points 6 inches long and spreading 5°, seen by Hardy (McGee, p. 193), is interesting because seemingly unreported in or near the area. 114 227

"Fishing" with staked pelicans who are then fed by free birds, is authenticated by the statement of Venegas for lower California, (McGee, p. 193). [226 231]

No fish nets, hooks, or lines were seen by McGee among the abandoned effects on Tiburon (p. 194). This is in accord with my observation. The abundance of sharks may interfere with net or deep water fishing.

The bow (p. 200) is of *palo blanco;* the release (pls. 28, 29), Mediterranean; the archer's position (pl. 29), with elbow above head, suggests a quick downward shot at a target or game lying on the ground not far away. 114 411

Mesquite, according to McGee (p. 207), is ground on the metate. Sr. Thomson told me of its being pounded in a hole in the ground. The Seri gave me the name a'kata for what I understood to be this earth mortar. According to Sr. Thomson's description, the flour from the first beans cakes and lines the cavity firmly, so that the bulk of the material is secured quite cleanly. In general, mesquite is mortar-pounded rather than metate-ground by the tribes from whom we have records, as is expectable from the woody nature of the beans. 114 252

McGee (p. 207) noted the viznaga cactus, Echinocistus, as rare in the Seri habitat, presumably owing to its use for water by the natives. I made the same observation on the mainland, but Sr. Thomson stated that along the roads the plant is being gathered for candying. 114 137

The one basket described by McGee (p. 208, fig. 24) is bundle-coiled and plain. The only one I saw in use among the Seri was ornamented with a plain reddish band. Sr. Thomson presented me with two which bear patterns (fig. 13), and showed me a photograph of a collection made by Mr. Davis for the Museum of the American Indian, Heye Foundation, nearly all of which were decorated, some fairly elaborately. Several of these are shown by courtesy of that institution in figure 12. As McGee observes, there is obvious resemblance to Southwestern baskets; especially of the Papago, Pima, and Apache. Southern California basketry is less similar. That of Baja California is unknown from specimens, though the mention of water-tight vessels used for winnowing and parching suggests a coiled tray of Seri type. The surviving tribes of Sonora other than the Seri use few baskets distinguishable from those of the non-Indian population. 114 285 [171]

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114 262 [171 514] The Seri "second harvest" of cactus seeds (p. 209), which Baegert and Clavigero also describe from Lower California (p. 211) is found also among the American Pima,[4] and is therefore likely to have prevailed as far as Cereus fruits were a principal food supply.

The ground-squirrel is not eaten by the Seri, the badger not by the Baja Californieños (p. 212).

McGee gives a valuable percentage estimate of Seri food composition: land game, large and small (including 6% of stolen stock), 21%; pelicans, other waterfowl, and eggs, 13; sea turtles, 25; fish, 15; shellfish, 10; cactus fruit, 9; other plants, 6; miscellaneous, 2; total animal, 84; maritime, nearly two-thirds. My impression is that clams, other mollusks, and crabs constitute more than a tenth of the total consumption. Clams especially can usually be obtained at low tide when wind and water prevent other food taking. I should also be inclined to raise the proportion of plant food, especially mesquite. The use of agave was almost certainly limited chiefly by the supply. Sealions, porpoises, and occasional whales could perhaps hardly be accounted for under the two percent of miscellaneous. On the other hand, deer are evidently taken only occasionally, and the figure for turtles seems too high, these animals being absent from Seri waters for months in the year and always free-swimming. McGee appears to have over-emphasized the importance of the turtle in Seri thought as well as life. I would incline to estimate the proportion of animal food in native times, before domestic animals could be preyed on, as rather under three-fourths of the total; of maritime, as perhaps three-fifths. Even these figures might be high for the bands primarily resident on the mainland, with free access to the mesquite thickets of the lower Sonora and Bacuachi (Bacavachi) courses, and the countless cactuses.

114 171 561 A double-bladed paddle pictured by the Dewey-Narragansett expedition of 1873 is reproduced by McGee (p. 219, fig. 28) without comment. This type of paddle is established for the Seri, Santa Barbara islanders, and San Francisco Bay Indians; then apparently is lacking until the Eskimo-Aleutian area. Among the Chumash it is native and associated with a plank-built canoe. On San Francisco Bay it was used with the rush balsa, and may or may not be due to Aleutian sea-otter hunters introduced by the Russians. It seems possible that the Seri and Chumash occurrences would prove connected by occasional use in Baja California, if we had fuller data, since some of the natives there went several leagues out into the open sea. We are so accustomed to think of the two-bladed paddle as an adjunct of the specialized kayak, that it too impresses as a complicated device, inappropriate with a simple raft. As a matter of fact, wherever scarcity of wood, or lack of skill and usage in working it,[5] resulted

[4] Russell, BAE-R 26:71, 1908.
[5] Cf. The Valley Nisenan, UC-PAAE, 24:253-390, 1929.

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in a paddle blade being cut separately from the shaft, the inventive step from attaching one blade to attaching two blades would have been insignificant—in fact, would be an improvement or variation rather than an invention. The determining factor as to its adoption would probably be the type of navigation as set by water conditions. This is borne out by the distribution of the double paddle, which clings to areas of open salt-water navigation or large bays approximating open water conditions. On rivers and lakes the double paddle would rarely help and often be in the way. In this way the varying association with skin boat, wooden boat, and raft boat seems accounted for. Another factor must be size of the vessel navigated. A broad or high canoe would scarcely allow of alternate paddling on both sides. This may be the cause of the absence of the implement on the Northwest Coast. Whether the Arctic and the California-Seri occurrences are to be historically connected, must probably be left an open question for the present. An answer in favor of connection will evidently depend on the establishment of sufficient other connections to set up a favorable presumption. Until then, the considerations just mentioned make the possibility of independent origin equally plausible.

The single-bladed paddles seen by McGee (p. 219) and myself were two-piece and hafted with nails. McGee is more interested in balsa propulsion by recumbent women with hands, shells, or unhandled blades. That such crude devices were used along shore or in bays often enough to be mentioned, is wholly in line with the conspicuous Seri indifference, slovenliness, and lack of standards; but it is also obvious that real paddles being known and made, these would be the ones taken on open sea voyages of a dozen miles in a region of notably variable winds and currents. The Seri are never fools in practical matters within their compass; and they could not have acquired their indubitable navigating skill by letting their women do most of their paddling with bare hands. The one woman I saw aboard was carried as a passenger across the Infiernillo.

What is typical of Seri habits is that the harpoon shaft is also used for poling, and the harpoon cord as anchor rope, tow-line along shore, sheet rope, and for tying a blanket to a mast and pole to serve as sail; just as the bailer of a leaky skiff is an enamel-ware plate or pot employed at other times for food. The whole harpoon, including the rod-iron point, but dismounted, seems regularly to be taken along on a transport voyage.

The Seri houses I saw opposite Punta San Miguel were like those described by McGee (pp. 221-223): long, narrow, low, and open at least at one end; but they were unroofed. There was also one of double length, and another "joined obliquely"—that is, annexes occupied by younger kin and their families. The lengthwise double house was open through, though constricted at both ends and the

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342 middle. Two imperfect wind-breaks of brush, less than a quarter of a circumference in curvature, stood near the camp..

On the subject of textiles and textile clothing (pp. 171, 225-232), 114 McGee is necessarily vague on account of lack of specimens. He 281 says that native kilts, from waist to knee, were either of birdskin or 286 "a rectangle of coarse textile fabric," "woven probably on some prim- 291 itive device"; that it is practically certain that a long-sleeved, short-bodied shirt or wammus is "of local aboriginal design" and was "made primitively of haircloth or native textiles"; that the probable genetic series of Seri garments was: 1, the pelican-skin robe used as a kilt, 2, the textile shirt, 3, the textile kilt; and that Seri fabrics, according to a Mexican informant, "resemble coarse bagging, and are woven or netted quite plainly."

Human hair cord could be netted, or twined in double weft into 114 basket-like bags or mats; it could hardly be woven into cloth without 171 a loom. The same holds of *irtle*, agave fiber. Bast of willow, cotton- 286 wood, beanstalk, such as was spun and twined, and perhaps woven on a limited scale, by the Colorado river Yuman tribes, was not available to the Seri, though they may have had nearly equally soft substitutes, even in their desert. Cotton they did not have. *Irtle* is a strong, harsh fiber, excellent for cordage, nets, open-mesh bags, and the like, and still largely used in Mexico for such purposes. It would also serve well for fringe-aprons, for which the Lower Californians used it. A fabric from it would be rough and stiff, giving little warmth, not very satisfactory for a kilt, and quite unserviceable for a fitted garment like a sleeved shirt. Cotton was the prevailing garment material found along the coast by the first Spaniards, north up to the Cahita (Ka'ita, namely Tehueco, Mayo, Yaqui); here *irtle* became more prevalent though cotton persisted; but the type of garment is not clear.

As to looms, *irtle* is today woven into carrying bags on a heddled belt-loom by the Nahua-speaking Indians of Sinaloa. The Mayo weave woolen girdles on a similar loom. They also weave woolen blankets on a demountable horizontal loom, the warp passing continuously around the two heavy yarn beams. It is not clear whether this is a hybrid Spanish or a purely native apparatus. The Opata and Pima Bajo loom is not known. The American Pima weave cotton both on a belt-loom and on a staked horizontal loom, but with warps in a single plane.[4] It is difficult to imagine these looms existing among the Seri, except the first mentioned; and this would not yield them much in the way of garments. There is no reason why they 114 should have worn more than the Lower Californian women's fringe- 291 aprons, supplemented perhaps by birdskin blankets and loin covers. 439 They no doubt secured occasional garments from neighboring tribes, as they gladly but irregularly wear those of whites today; and this

[4] Russell, BAE-R, 26:148-152, 1908.

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is what their "shirt" (McGee, pl. 29) probably was. The fabrics of McGee's Mexican informant may refer to gunny-sacks made over into improvised imitations of civilized garments; or to single-element carrying bags. It is entirely possible that contact with the cloth-weaving tribes of Sonora long ago induced the Seri to shrink from habitual complete nudity; but it is difficult to imagine them producing even a coarse wearable cloth. McGee's interpretation of the historic sequence of Seri garments is of course wholly speculative.

The cradle shown by McGee (p. 226, fig. 30) consists of a kite-shaped hoop with eight sticks tied across it and a lashing thong passed back and forth across it half-a-dozen times. Even allowing for some slip of the parts in transport to Washington, this specimen is quite typical in Seri disregard of evenness, neatness, order, or finish. The Yaqui cradle illustrated by Hrdlička[7] consists of eight or nine lengthwise sticks or canes twined close together. The Lower Californians used a basket or a turtleshell. The Gila Pima and river Yuman cradle is of "ladder" type, and therefore similar in structure to the Seri except that it lacks the point at the bottom and has the sides parallel; it also carries a hood of wickered or twilled splints. As regards basic structure, one form of Maidu cradle is most similar to the Seri; just as the plan of the Yaqui one reappears among Miwok, Yokuts, and Mono a little further south in California.[8] It appears from this irregular distribution that so simple an apparatus as the open or flat baby-carrier, which can be just as serviceable without a definite technique or style entering into it, is likely to vary locally without much significance, and that its forms will indicate historic connection only when they are parallel in a number of details. In these respects it resembles house types. In both these objects, new "inventions," certainly of detail elements and perhaps of basic structure, seem to be readily made and adopted.

McGee's finding (p. 247) that the Seri are "not habitual stone arrow-makers" has a parallel among the river Yumans, and, at least partially, among the remaining Sonoran tribes. His conclusion (p. 259) that the *yerba de la flecha* (magot, Sebastiano bilocularis?) was an Opata but probably not a Seri arrow poison, seems sound. The plant was shown me on the island, and the Seri knew it as venomous, but volunteered nothing as to using it on arrows.

That the question of Seri cannibalism must be left open, with a preponderance of evidence against the practice (p. 263), also seems a conservative judgment.

As to shields, McGee learned of loose pelican pelts and turtle-shells (p. 264), I of armor and a large upright shield of hide. Both accounts may be right, one referring to emergency pick-ups, the other ——— to prepared defence or attack.

[7] AA 6, pl. 9, 1904.
[8] BAE-B 78:635, fig. 48, pls. 80, 84.

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to prepared defence or attack. The Seri mode of life and induced temperament must have led to many instabilities, with make-shifts often actually more in use, but finished or efficient types of artifact seemingly latent and sporadically emerging in the stream of their culture. Thus, the shell alongside the double-bladed paddle; plain baskets seen in use, but a series patterned in a definite style being produced as soon as their manufacture was profitable; unroofed and roofed houses. Similarly, the two-pointed fish-spear and olla carrying-net, which neither McGee nor I saw, but which may persist in memory in the culture ready for revival on occasion.

Somewhat similar, perhaps, is the status of polygyny, which prevailed in McGee's day (p. 279) a half generation after a disastrous war, but was not the rule, or was successfully disavowed, in earlier times and to-day.

Errors and Misconstructions

McGee dwells at length (pp. 152-156) on three strong trends of Seri life and culture: the pedestrian habit, accompanied by quite exceptional fleetness; a hand and tooth sense with corresponding absence of tool sense; and a race sense unalterably opposed to mixture with alien blood.

All the Sonora and Southwestern Indians were and largely still are fast and sustained long-distance travelers on foot. There is nothing to show that the Seri were superior to the others. The one time they remember having met the Papago in a foot-ball race, they were beaten. Yaqui warfare is a record of at least equal endurance and ability to evade superior civilized forces. In fact the faculties of the Yaqui are the more remarkable in that they have always been settled farmers and often moved in larger bodies. The incredible fleetness of the Seri was probably most manifest in mesquite thickets and on rocky ground. That they should outrun a horseman on an open plain is the sort of tale that one hears on every frontier and which the more intelligent frontiersman does not take seriously.

Hand and tooth sense was undoubtedly strong among the Seri. The same thing, especially as regards food, is reported for the Lower Californians. But the inference of lack of tool sense is erroneous. Knives are prized by the Seri, and, along with nails, axes, and the like, are handled with a direct, crude effectiveness. The crudity is due to the lack of standard, order, and interest in finish which pervades all Seri cultural manifestations and which rests ultimately on their essential isolation and self-sufficiency in an unusually forbidding environment. What a Seri is interested in is not a neat job but one that will substantially meet his immediate need. Their modern plank boats are weak in plan, badly joined, and always leaky; but they serve. A structurally stronger boat would probably profit noth-

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ing, because it would be swamped in a sea which it could resist. The joining and calking are always carried far enough that the boat can be bailed faster than it leaks. That the Seri prefer to bail rather than to finick over joints, is a matter of preference. Most of our real frontier life runs on much the same plan, though sprung from a tradition of intrinsic standard and provided with a superior tool equipment. Tribes like the Walapai and Papago, who live in nearly the same desert, show much of the Seri combination of technological crudeness and effectiveness. They do make an exception in basketry, which is what has chiefly reached our museum cases from their culture; but the Davis-Heye collection shows that the Seri too can make baskets of unsuspected quality. My impression, based on the way the Seri handle their knives, boats, bows, and the like, is that they have excellent practical mechanical sense, but that their standards are astonishingly different from our own. Most people that depended so much on sailing their boats as the modern Seri do, would not be content with two sticks, a blanket, and a harpoon line. But, given the willingness to operate with this equipment, very few would be as successful in quickly rigging and skilfully handling the sail. And sailing is something the Seri have recently learned or evolved. They are the frontiersmen of native culture: hardy, rude, unorganized, practical, efficient; but, like our own frontiersmen, in no sense only half emerged from the tool-less animal. McGee was so inspired by the desire to find ultimate "primitiveness" among the Seri that he often ignored the tremendous effect of their habitat which he so well observed and described. After all, in his day cultural evolutionism was still in vogue.

As to race sense, McGee seems partly but only partly right. Chico Romero of his own accord asked me if other Indians had venereal diseases, and on the return question replied that the Seri were entirely free from them. I also saw and heard of no half-breeds. On the other hand, Chico's historical tradition told of the violation and keeping of captive Tepoca women, and since his own son was descended from one of them, in the second generation, Chico's mother-in-law must have been a Tepoca. McGee's "alien conjugal union" as the "blackest crime" (p. 11) is therefore an exaggeration, and his informant's statement that a Papago woman captive among the Seri never could have had children because she was an alien slave (p. 278), must rest upon a misunderstanding.

The groom's continence for a year after marriage as a moral test before admission to full husbandly status (pp. 280-3), is probably a matriarchally colored fantasy based on another misunderstanding. As already mentioned, Chico was interested, but mildly riskily amused, at the idea when it was put before him as a foreign Indian custom. He reacted like the average white man under the circumstances, not in the least like an actor skilfully feigning ignorance.

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114 583 As to the "total absence" (p. 285) of marriage purchase, whereas I found it, such purchase can hardly be believed to have originated wholly within the last 35 years, in view of its wide distribution in native America.

114 614 The whole matter of maternal lineages crystallized into totemic clans with matron rule (pp. 10-11, 167-8, 269 seq.) seems a fantasy. A careful reading of the passages in questions reveals how much McGee has built up on statements which he conscientiously admits to have been slender, probable only, and subject to possible misunderstanding. It must be remembered that in 1894 the matriarchate as original and primitive was still standard anthropological doctrine. At any rate, I got nothing suggesting even matrilineal reckoning in my indirect approaches to the subject, and explicit denials when it was directly presented.

114 342 That house-building may now and then be "accompanied by a chant" (p. 223) is possible, though it seems out of accord with the haphazard and shiftless methods of Seri work and the flimsy irregularity of their homes; but that the chant was "usually led by the eldest matron" seems more matriarchate.

114 174 That the Upanguayma, Guayma, and Tepoka were successively "extruded" (p. 75) would be correct if there were anything to show that the Seri were the parent stock of superior virtue, conservatism, and faithful attachment to their original habitat.

114 601 The statement (p. 11) that "kinship terms are strikingly scanty," made in the face of round-about and imperfect speech communications with the Seri, I cite only as an indication of the degree of McGee's readiness to fall back upon his preconceptions when facts became thin.

114 304 I did not note the absence of superior medial incisor teeth observed by McGee (p. 169) in married women. If a regular practise, its connection with the puberty rite would be a natural inference. But knocking out of teeth is a rare custom in America.

114 224 McGee's statements (pp. 196-7) that it is "undignified, if not wrong" to kill deer other than with the hands, and that jackrabbits are "customarily taken alive to camp," seem over-emphases. That a sense of sport or passing pride, or lack of weapons, now and then leads to such happenings, I do not doubt; but the Seri seem too practical and unromantic to exact rules on the point. I suspect that a youth who insisted on living up to them would soon be considered a vain lore. I may add that I saw a crippled wild duck hobble about the camp on Tiburon for two days, being played with occasionally by the children—without unusual roughness or unkindliness—and that finally it wandered to the water and gradually drifted off without notice being taken.

114 302 614 Face painting is construed by McGee as sematic of totemic line-

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ages (pp. 164-167), and Hardy's story of his being painted is interpreted as ceremonial adoption (pp. 277-8). My conviction is that the Seri paint primarily for adornment, and that further significance is either secondary or absent. When I reached the island and about thirty people, including visitors from other settlements, were gathered to receive and inspect me, all the younger women and one or two adolescent boys were freshly and very neatly painted. After all, their ragged cast-off civilized garments were nothing to make a show with on a state occasion. In former times, the everyday-wear pelican robes would not have served much better. The ocher red, dumortierite blue, and gypsum white pigments however gave a chance for decoration and display. Three days later, when our party was an old story, some of the faces still carried paint, but it was worn, defaced, and bedraggled. It seems unlikely that people should greet strangers by decorating themselves with representations of lineage totems which they at the same time denied or tried to conceal from their knowledge. The construal of Hardy's painting as an adoption-rite rests on the same blood-kin interpretation. It was probably nothing more than an act of friendliness tinged with the simple humor of which the Seri have a strong sense.

Face painting in fact seems to be the chief if not only purely aesthetic expression of Seri culture, their mode of life and psycho-physiological habits being such as almost to prohibit any other form of art. In this painting, on the other hand, they have achieved a high degree of stylization and taste. The designs I saw were throughout in the manner illustrated by McGee in his plates 13-16, 18, 20, 22, 24-26.

Ethnographically, the interest of this style lies in its similarity to the river Yuman face paintings. The Seri first of all specialize on a horizontal bar across the nose and cheeks, immediately below the eyes; in addition to this, there may be vertical elements dependent over the cheeks. The design deliberately breaks across the natural lines of the face in such a way as to orient itself with reference to the eyes without touching them. Bordering or enclosing of the eyes is avoided; neither are planes like the cheeks, forehead, or chin felt as fields to be filled in with decoration. The fundamental plan attacks the face at once drastically and subtly. That the style has both feeling and rigor is shown by the fact that none of the endless variations of color and design detail depart much from the basic scheme. That this scheme is old is shown by Hardy's description of a century ago. It is a true art of high order within its narrow compass.

The Mohave paintings[9] are somewhat freer and more variable, but also less classical or chaste stylistically. The transverse element

[9] Kroeber, Handbook, BAE-B 78, fig. 69-82, 1925. With the Mohave, contrary to the Seri, the vertical elements predominate over the horizontal. The Gila Pima style (Russell, pl. 28), and the Havasupai (Spier, AMNH-AP 20:196, 1928), are also related.

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171 302 below the eyes and the verticals below them are predominant in most cases. Even where the design extends above the eyes, it does not cover the forehead, but terminates in a straight edge paralleling the one below. Where the chin is involved, the Mohave bring solid triangles up from the jaw and then leave the chin itself blank, instead of accentuating its contour with color, as a less sophisticated style would do. Like the Seri, the Mohave are a people with deficient material culture and little dress suitable for display. The two tribal styles are unquestionably connected in their history.

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SERIAN TERRITORY AND TRIBES

The close speech unity of the Seri, Tepoca, Salineros, Guaymas, and Upanguaymas is affirmed by all the older authors. The name Seri has however been used in several senses, even in pre-ethnologic days: (1), for the entire group of related tribes, sometimes excluding and sometimes including the Guaymas; (2), for the inhabitants of Tiburon Island and the immediately opposite stretch of mainland; (3), for the inlanders more or less associated with the mission establishments from Hermosillo upstream, in contrast with the "Tiburones" of the island; (4), for the modern fusion of mainlanders and islanders, which evidently includes descendants of all Serian tribes except the Guaymas and Upanguaymas, who became absorbed in the lowermost Yaqui tribe or village of Belem. It is in this fourth and last sense that I use the term; my principal informant, in the tradition given, employed the third meaning; McGee mostly the second, with a strong implication of the thorough apartness and greater primitiveness of the islanders, as compared with their ethnic kinsmen.

The Tastiotefios of my informant appear not to be known otherwise. The coastwise alignment of tribes from south to north seems to have been: Guaymas, Upanguaymas, Tastiotefio, Seri or Tiburones, Tepoca, Salinero.

As already mentioned in the Introduction, it seems inherently unlikely that Serian territory extended as far up the Sonora river as Ures, near which Orozco y Berra puts the boundary. His undue extension is probably due to the fact that the missions to which Serians (other than Guaymas-Upanguaymas) became attached, were situated in the valley of the Opodepe or Horcasitas branch of the Sonora. According to McGee[10] these Missions were: Santa Magdalena de Tepoca, founded in 1699, soon abandoned, location long lost but probably up-stream from next; Nacameri, 7 leagues below Opodepe; Nuestra Señora del Pópulo, 9 leagues down, at Horcasitas; Nuestra Señora de los Angeles, 3-4 leagues down, maintained, with preceding, until 1767; Pitic or Pueblo de los Seris, more than 12 leagues down (opposite Hermosillo), founded last, in 1742. Nacameri and Pitic sound like Pima, not Seri, words. Whether the river valleys from Hermosillo up were actually Pima territory, as here surmised, will have to be established from documentary sources, possibly supplemented by recollections of the Pima surviving about Ures. It is conceivable that Serian tribes had driven the Pima out of the Sonora valley shortly before the founding of the missions, thus effectuating the division into Pima Bajos and Altos; or that the Pima shrinkage out of the middle of their territory began after their mis-

[10] Pp. 66, 69, 70, 72.

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sionization. The Pima are so uniform in speech from the Gila to the Mayo that their territory must be assumed to have been continuous at no remote date.

Seri Population Estimates
After McGee, pages 135

1700,	Velasco	2,000
1824,	Troncoso	1,000+
1826,	Ortiz, Tiburon only	1,000-1,500
1826,	Hardy	3,000-4,000
1841,	de Mofras	1,500
1844,		550
1846,	Velasco	500—
c. 1855,	Encinas	400-600
c. 1865,	Encinas	250-300
1894,	Mashém, native	250-350
1930,	Thomson	175

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LANGUAGE

Seri speech on first audition seems fairly difficult for the European ear. This is on account of the presence of marked tone instead of stress accent; an abundance of "gutturals," that is, palatal and velar stops and fricatives and glottal stops; a surd l and surd bilabial f; and certain consonant clusters. None of these features, however, present serious difficulties to a phonetically trained ear, and it is expectable that when intensive study can be made, it will show the Seri language a distinct one indeed, but in no sense abnormal. The tone variations are great enough to be unusually plain, and syllables are spoken in an even, measured way with clear articulation.

The principal present interest of the vocabulary I recorded is in the light it may throw on the ethnic relations and origin of the Seri. The vocabulary puts beyond doubt the often accepted kinship of the Seri to the Yuman languages.[11] However, the differences are also great. I had expected that an accurately recorded vocabulary might class Seri outright as one of the Yuman group of languages. This expectation however has been dispelled. Seri is coördinate with the Yuman group as a whole, not a branch of it.

Another possibility remains to be considered. The Yuman family may be described as situate at the head of the Gulf of California, extending east, north, and west of the mouth of the Colorado in a fairly compact block. The most remote member of the family geographically, as well as the most diverse intrinsically, it appears, is Cochimí, which occupied Lower California between about latitudes 26° and 31°,[12] in other words, the central part of the peninsula, across the Gulf from the Seri. Now if Seri is an ancient off-shoot from the main stem of the Yuman languages at the head of the Gulf, then Cochimí, which is also a much diversified off-shoot from the same stem, but on the other side of the Gulf, ought to represent a separate specialization independent of Seri, and the ancientness of split-off combined with the territorial separation ought to have led to an increased divergence of the two off-shoots from the presumedly ancestral and still relatively homogeneous main Yuman block. That is, in this event the relationship of Seri to Cochimí being through the main Yuman group, Seri and Cochimí should be more different from each other than either from Yuman. The line of similarity and kinship thus would be Seri-main Yuman-Cochimí.

[11] A. S. Gatschet, Der Yuma-Sprachstamm, 1886 (Zeitschrift für Ethnologie, 3-34, 1871-1882); D. G. Brinton, The American Race, 1891, 1901; J. W. Powell, BAE-R, 7:124, 1891; Kroeber, UC-PAAE, 11:379-396, 1916, McGee, 396-408, on the basis of Hewitt's comparative analysis, 389-344, makes Seri unrelated.

[12] Kliksi or Kilbox and Abor'ak-Paipai in the northern end of the peninsula belong with Diegueño, Cocopa, Walapai, etc., that is are "normal" Yuman and not Cochimí-Yuman in type.

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197 On the other hand, if the hypothesis were true that the Seri
174 reached their historic habitat from across the Gulf, they would have come from territory which in recent times was Cochimí, and their presumably closest relationship would be with these former neighbors, and only indirectly with the other Yumans. Thus the line of affinity would be Seri-Cochimí-main Yuman.

192 It is to test these two alternative hypotheses of Seri origins that
197 the accompanying comparative vocabularies of Seri, Cochimí, Yuma,
[121] and Cocopa have been selected. They are limited because the only material pertinent to the problem at issue is stems represented in all three linguistic groups; and both the Seri and Cochimí data are scant. A number of words of the same meaning differ completely in the three groups—in their surface appearance at any rate—and have therefore been omitted as irrelevant. The residue consists of 33 Seri words which show more or less resemblance to the corresponding Cochimí or Yuman words or to both.

The Seri, Yuma, and Cocopa vocabularies were recorded by myself. Yuma and Cocopa represent distinct branches of Yuman. Cochimí 1 and 2 were recorded or copied respectively by W. M. Gabb in 1867 and by J. R. Bartlett about 1852, and are transcribed from photostat copies of the originals filed in the Bureau of American Ethnology and furnished through the courtesy of its Chief, Mr. Matthew Stirling. Both are entered on Smithsonian printed blanks. The Bartlett vocabulary is designated "from M. Robinia at Guaymas." It may represent a vocabulary taken down by Robinia from a Cochimí and given to Bartlett, or a record made by Bartlett from Sr. Robinia's memory of Cochimí. The words for two and three are identical, even in spelling, with those given by Clavigero. Those for one and man (tepeeg and tanna in Clavigero) are different. The Bartlett vocabulary may thus not go back to a single native source.

The relations of the Cochimí dialects are not clear. To judge from the three Lord's prayers given by Clavigero, languages rather than dialects may have been involved. These prayers begin respectively pennayú nakaenambá, na-happá anuna-hang miamú, cahai apá ambeing miá, and are attributed to latitudes 25°30'-26°, 28°, and 29°-31° in the peninsula. Gabb's entry for "my father" is ka-ai and for "sky" em-hai, which clearly correspond to Clavigero's northern Cochimí cahai (h silent in Spanish, usually a glottal stop) and ambei-ng ("in heaven"). Bartlett's dialect is not so easily identified. His word for father is calemlag, and his sky remains a blank entry. There are a few other identities with Clavigero, besides the numerals mentioned, but they are to words scattered in Clavigero's

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text, without reference to the locality of the dialect from which they are taken.[13] 192 197

Gabb's vocabulary therefore represents a Cochimi dialect or language north of the latitude of Tiburon; Bartlett's, a Cochimi dialect, or possibly mixture of dialects, farther south, somewhat more nearly abreast the Seri, but of undetermined provenience.[14]

Words from both these Cochimi sources are reproduced as they appear in the Bureau manuscripts, except that the accents have been put after instead of on the vowels, and that Gabb's syllabifying hyphens have been omitted where their absence seems irrelevant to his phonetic intent. Gabb states that his *ch* is as in German; his ch is presumably as in Spanish and English. 192 197 104

In the Seri, Yuma, and Cocopa lists, the circumflex denotes long open, the macron long close vowels; small capitals, vowels obscure in quality; superior vowels, glides or whispered vowels. Of consonants, q is velar k; X, velar fricative; x, palatal fricative; c, sh; ɬ, surd l; italicised stops, unvoiced and unaspirated stops (intermediates); ð, interdental sonant fricative; v, *F*, bilabial v and f. The apostrophe denotes the glottal stop; its reverse, the Greek rough breathing sign, an aspiration;[15] a superior period, consonantal length.

In Yuma and Cocopa, the prime accent denotes stress accent;[16] in Seri, high tone. Seri low tone is shown by italicized vowels; middle tone, by lack of indication.

The comparative vocabularies of Seri, Cochimi, Yuman and Cocopa are given on the following page.

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[13] B, sun, yhu, C. ñu; B, summer, mesahu, C. mejñá, June to August, season of pitahaya harvest, also year; B, autumn, amaiñ, appi, C. amaiñ-appi, August to October; B, winter, maaihit, C. majñil, December to February; B, spring, maaihe'a, C. majñea, February to April; B, ñ, magarahagum', C, the same (but: B, ñ, mearracoqui, C, nagnand tajoxq ignimet). Bartlett's vocabulary is general, whereas Clavigero chiefly gives names of foods, plants, animals, and points of ethnographic interest.

[14] Hamburgen in his Spuren der Astrikischen Sprache, 489-472, 496-511, 1868, has assembled and discussed all available Cochimi material then in print, except Clavigero's.

[15] The initial pronominal h- of Seri body-part words might perhaps more properly have been written with a rough breathing, '.

[16] There is a tendency for the stressed syllable in Yuma and Cocopa to be higher in pitch, but the tone seems an incidental accompaniment, and not organic. The same is true of Mariopa and Walapai, and I now believe, contrary to previously expressed opinion, of Mohave and Diegueño.

	Seri	Cochimí 1	Cochimí 2	Yuma	Cocopa
man	ktam	(wanyu-)amiˈ	delma'	l'pa"	iyupa'tc
person, people	e'm·ê	maha	demansu'	pi'lpa"	tcapa'l
hair	hetɹe'l	epok	lagubu'	hê'e"	amxwaɹ
nose	hê"r	vichpyuk	huichil	hixê'	ixê'
eye	he'toᵉX	yupicha	yebaka'	hêêe"	iyu"
ear	he'stɹa	mang-ngi	muguil'	hacma'lyk	icmâ'l
tongue	hipɹ	hapara	abilg	hipa'ly	ampaɹ
tooth	hitâ'st	hastaa'	foea'	hêê"	iya'wi'
beard	hita-môkne	hy-a-mi	jaeta	yâveme"	ialeme'e
bone	hitak	hak	acheso' (Sp?)	nyetc-ack'k	nyengiyâ'k
blood	hfâ"lt	huat	jued, ined	ny-êxwi'l	nyény-exwa'l
house	âqo	ewa	guaka'	ava"	"wa"
sky	amîm'e	embai		am·a'l	"mâ'
moon	hê'câX	konga	kegiimba'k	xely'a"	xeɹ'a"
earth	amt	emat	akug	ama'l	amatc
rock, mountain	ast	echkai	aba'	avi'	awi'
fire	amak	maahra	usi	a'a'u	a'a"
water	aX	tasi	cai	axa"	xa'
sea	Xepé	kachpara	caapai	axâ"si'l'ly	xa'ex'l'ɹ
tree, wood	e"ê, aqe'aXqᵉ	wache, aputᵉ	agimoso', allegcoᵉ	a'l'	l
maize	a'pXᵉtɹ	pechkarai		ta#l'tc	tcâs
tobacco	â'pisqo'pX	mingnga	hui	a'û'v	'ûp
dog	aXc	ethatta	masa'	axa'l	
bird	ce'kâtɹk	icha	kabto'	atciye'r	
good	Xê'pê	tai'p	aha'mi	axo'lk	paxwa'l
large	kâ'kwx	chai	ca'okoo	vata'lk	îxe'l
small	keslɹ	achtawan	canil	ano'cek	alytca'c
yellow	ma'seɹ	zimarai	yembil	aqwe'sk	qwac
one	tacoᵉ	chaqui	dopi'	ace'nt	"cit
two	kôk·ᵉ	kooak	goguo	xavi'k	xawa'k
three	ka'pXᵉ	kabiak	combio'	xamu'k	xamo'k
eat	hîk-o"êt	hu-a'	guaba'	hamâ'-m	'oma"
drink	axe-se'si	desi	calisi'	xa'-si'-m	'osi"

[1] Wanyu is young.
[2] Firewood. The first words mean tree or stick.

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The Seri similarities evident in the vocabulary may be summarised as follows: 192 197

Definitely more similar to Cochimí: man, person, large : 3.
Somewhat more similar to Cochimí: tooth, house, two, three : 4.
Equally similar to Cochimí and Yuman: nose, bone, blood, sky, earth, fire, drink : 7.
Somewhat more similar to Yuman: hair, tongue, water : 3.
Definitely more similar to Yuman: eye, wood, dog : 3.
Perhaps more similar to Cochimí: sea, maize, bird, small, yellow : 5.
Perhaps equally similar: rock, good, one, eat : 4.
Perhaps more similar to Yuman: ear, beard, moon, tobacco : 4.

The result is, in brief, that the available data indicate the Seri language as about equally related to, and differentiated from, normal Yuman and Cochimí. There is proof neither for the hypothesis that Seri and Cochimí branched off in different directions from the main body of Yuman tribes, nor for the one which would branch the Seri off from the Cochimí after these had drifted into the peninsula and acquired a certain specialization there. The relation of the three language groups might be described as an equilateral one—or more exactly as isosceles, with Cochimí and Yuman somewhat the nearest to each other, but Seri equidistant from both. 197

Various hypothetical considerations might be adduced to explain this condition. Seri might be construed as an ancient offshoot from Yuman or proto-Yuman, which later came into contact with the Cochimí off-shoot and was influenced by it. Or, Seri might be conceived of as a Yuman branch that had drifted earliest into the peninsula and then was superseded there by Cochimí as a later offshoot from Yuman. But all such suppositions are equally lacking in positive evidence in their favor, and discussion of them tends to become fine-spun among conjectures. It is wisest to accept the salient fact, namely that available linguistic evidence affords no decisive proof either for or against the hypothesis that the Seri originated in peninsular California, and to leave the problem there in the hope that fuller knowledge of the languages will ultimately solve it. 194 197

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PHYSICAL TYPE

123 I had a calipers and rule with me on Tiburon Island, but no
141 stature rod. The Seri proved not to object to being measured, but in order to avoid the possibility of arousing prejudice, I had left the matter to the last; but for this, my series would have been longer. The results are given in the adjoining table. The somewhat unconventional finger and foot measurements were taken because of the seeming length (more probably only unusual slenderness) of these members, but may give an approximate indication of the bodily height.

114 McGee is undoubtedly in error (p. 136) in estimating the average
141 height of Seri men at 1825 mm., of women between 1727 and 1750. I would deduct 100 mm. from these figures.[17] The Seri impressed me as less tall than the Mohave and Maricopa, who run about 1720 to 1740.[18] Hrdlička[19] found the following for the region: 53 American Pima, 1718; 50 Papago, 1709; 50 Yaqui, 1696; 30 Opata, 1670; 53 Mayo, 1673; 1 Seri, 1707. The Seri look taller than they are on account of their slenderness. This in turn might be due to preponderant animal diet, general malnutrition, or congenital type. Certainly their calves, arms, and wrists are notably thin. The forearm bones in particular look long and exceptionally thin. The muscles are generally firm.

[142]

Head form, and nose index for adults, run close to those of other Sonoran tribes. Thus:

Cephalic index, 12 Seri men, women, and children, 80.4; Hrdlička,[20] 1 Seri, 81.3; 50 Mayo, 80.3; 31 Opata, 79.3; 49 Yaqui, 78.5. The Pima in the United States are longer headed, 78.1. Eleven Yaqui skulls averaged 75.7, equivalent to 77+ in the head by the usual estimate.

Nasal index, Seri, 4 men of 28 and up, 79.3, 4 women of 20 and up, 74.7, mean of total 8 adults, 77; Hrdlička, 1 Seri, 71.9; 53 Mayo, 80.2; 31 Opata, 81.1; 52 Yaqui, 78.9; 50 Papago, 79.8; 53 American Pima, 78.1; ten Kato, 38 Mohave, 82.

The Seri are slightly broader headed and narrower nosed than the others, but the difference does not seem significant, especially in view of the smallness of the Seri series.

141 Physiognomically the Seri are quite different both from the
142 Yaqui and Mayo and the American Pima and Papago; in fact con-

[Text continues on page 38]

[17] Hrdlička, in McGee, 143-147, gives the following on the skeleton of a Seri woman of age 20-24: Stature (computed by Manouvrier method), about 1520 mm.; indicated musculature, ample; cranial index (occipital deformation, probably unintentional), 80.9; nasal index, 49; skull capacity (Broca) 1545, (Flower) 1490 cc.

[18] Mohave, 1716; Yuma, 1722; Maricopa, 1749 (Hrdlička, in Putnam Anniversary Volume, 405-424, 1909); Maricopa, 1722 (ten Kato, Journ. Am. Ethnol. and Archaeol. 3:117-144, 1892).

[19] Putnam volume, as just cited; the Seri, in AA, 6:88, 1904.

[20] AA, 6:86-88, 1904. The nasal index means are given by Hrdlička. Neither means nor individual measurements are given for cephalic index, but the percentage distribution in index ranges of one point allows the calculation of an approximate mean.

SERI MEASUREMENTS—1930

Estim. Age	Name	Length Head	Breadth Head	Length Face	Breadth Face	Length Nose	Breadth Nose	Cephalic Index	Nasal Index	Length[1] Middle Finger	Length[2] Foot
	MALES										
55	Santo Blanco	188	154	129	150	53	44	81.2	82.	74	243
42	Urbano Sanchez	186	150	124	145	56	42	80.6	75.	70	244
32	Chico Romero[3]	189	159	131	156	58	46	84.1	79.3	78	260
25	Luis Huicho	189	149	113	143	50	40	78.8	80.	75	240*
16	Pedro Comito	181	144	112	135	53	37	79.6		68	242
12	José Manuel Romero.. (son of Chico)	176	143	107	124	41	29	81.3		63	235
10	Juan Chavin	185	148	103	134	42	37	80.		57	192
	FEMALES										
43	Maria	182	143	124	141	55	43	78.6	78.2	74	225*
26	Loreta	187	147	126	144	61	46	78.6	75.4	76	236*
22	Maria Antonia	188	159	122	147	55	41	84.6	74.6	76	223*
20	Maria Ramona ..... (dtr. of Santo)	183	140	100	136	48	34	76.5	70.8	73	225
18	Martina Sanchez[4] ...	180	152	110	141	52	39	84.4		72	234*
13	Lupe	178	136	107	126	46	35	76.4		63	203
	Mean of 13 individuals							80.4			
	Mean of 5 adults								77.0		
	Mm. less than head breadth:										
	Av. 6 indiv. act. 25+				4						
	Av. 7 indiv. act. 23—				19						

[1] With calipers, tip to proximal crease at base of finger.
[2] With calipers, round of heel to round of end of big toe (*second too longer, measured instead); foot unweighted, hanging free.
[3] Talbot, broadest, and heaviest in the group.
[4] Recorded as "Martin," but entered as female.

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stitute a distinctive type, as shown by McGee's pictures of them, as well as mine (figs. 1-11). Physiognomic distinctiveness however frequently fails to appear in measurements, at any rate the standard ones, and is often no doubt largely a matter of expression rather than of features. Expression must be determined by habitual feelings and behavior, and these in turn are heavily influenced by culture, which again, through subsistence, is interrelated with geographical environment. It is therefore expectable that a tribe like the Seri would look different from other populations. The one feature of face which impressed me as a Seri anatomical peculiarity was narrowness of lower jaw as compared with breadth in the region of the cheekbones. The reader's verdict from the photographs may or may not coincide with mine.

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COMPARISON AND PLACE OF SERI CULTURE

It may seem premature to attempt to place the Seri culturally with reference to other Southwestern tribes, since only a fraction of their and other Sonoran cultures is on record. But it does seem justifiable at least to forecast an answer to the problem of how far their culture is an exceptional growth or explainable by the generally accepted principles of historical origins and contact and environmental adaptation. [7]

Any present comparison must be made primarily from the Seri outward. Were one to start with a more fully known tribe, too many absences of traits would be ambiguously construable as lacks either in Seri culture or in our knowledge of their culture. Positive Seri traits on the contrary, though less numerous, have definite meaning according as they occur or are known not to exist among other, better-known peoples. List 1 accordingly compiles the occurrence elsewhere of characteristic Seri traits, those peculiar to them, at least within the Southwest, being signalized by an asterisk.

For Lower California, data are about as meager as on the Seri, and, except in the extreme north of the peninsula, can probably no longer be secured. This is specially unfortunate because the environment, subsistence habits, and culture level of the Lower Californians were obviously similar to those of the Seri. To facilitate such comparisons as are possible, I have compiled in List 2 the principal specific known traits of peninsular culture. Those recorded by Baegert seem all to relate to one group, the Waicura in the south—but not the extreme end—of the peninsula, and have been subdivided as they recur or seem not to recur among the Seri. The data preserved by Clavigero and Venegas refer to several groups and are only partially localized as to occurrence. They have therefore been presented separately within the list. It so happens that nearly all of them are not known to be Seri.

List 3 bears indirectly on the Seri through the Pima, chief immediate neighbors of the Seri. The specific ethnological records of the southerly or lower Pima have never been systematically compiled. The upper Pima consist of some Sonoran divisions pretty well missionized and absorbed; of other divisions who have gradually come to be called Papago; and of the Gila River or United States Pima, who were brought under mission influence relatively late and imperfectly. Since nearly a century ago the Papago and Gila Pima have been able partly to revert to their old culture, while their kinsmen in Mexico have continued to lose theirs. It is unfortunate that the one systematic ethnologic account of any Pima group, Russell's monograph, deals with the peripheral Gila division. However, these Gila Pima are obviously similar in some respects to their neighbors, the Colorado River Yuman tribes. List 3 has therefore been drawn up

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17 to distinguish Yuman-Pima resemblances (which may have originated with either group) from Pima traits which are not River Yuman; and, to balance the picture, from River Yuman traits which are not Pima.

Distribution Lists

LIST 1. OCCURRENCE OF KNOWN SERI CULTURE ELEMENTS AMONG OTHER TRIBES

[Abbreviations: LC, SC, CC, Lower or Peninsular, Southern, Central California; RY, Colorado River Yuman tribes—Mohave, Yuma, Cocopa, Maricopa; W-H, Walapai, Havasupai, or both; API, American or Gila Pima; Pue, Pueblo.]

Bodily

Head carrying by women. Yaqui-Mayo, RY, Pue, API.—Abs. SC, LC. Seems corelated with pottery water vessels.

Pole carrying by men. Y-M, Sinaloa. Absent in United States, probably in LC (single-load pole mentioned).

Net carrying-bag. LC, SC.—CC, W-H, baskets; RY, API, mesh frames.

Nose piercing. RY, LC.

Face paint, horizontal across nose under eyes. RY; some W-H. Vertical below eyes; RY, W-H, API.

Food

Little or no boiling of food. LC.

Both sexes cook. LC.

Re-eating cactus seeds. LC, API.

Technology

Unroofed house, windbreak. LC.

Cane balsa. LC; rushes, SC, RY, CC.

Double-bladed paddle. Chumash, CC (San Francisco Bay).

Fish harpoon. LC, CC; SC? Absent, RY.

Two-pronged fish spear. LC? (Clavigero, "horquilla").

Long self-bow. LC, SC, RY, Yaqui-Mayo.—API, Pue, less long.

Reed arrow, foreshafted. LC, SC, (RY), Pue, Yaqui-Mayo, Mex.—Arrowweed, API, RY.

Mediterranean release. SC, Apache.

Pottery. Yaqui-Mayo, API, RY, W-H, Pue. Abs. LC; SC (part), CC (part). Scraped, NW Mexico, W-H, Pue, CC. Paddled, RY, SC, API.

Multiple foundation coiled basketry. SC, CC; prob. LC; Pue, RY rare; API, W-H, three-rod.

Body armor of skin. W-H.

*Long skin shield.

Human hair cord, etc. LC, SC, API. Not RY, W-H, CC, Pue.

Kite-shaped stick cradle. CC. The related hoop type is W-H, ladder type API, RY, SC.

Kinship

Many terms. RY.

Reciprocity. RY, W-H, SC, CC; weaker, API, Pue.

*Numerous (8) sibling terms.

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*Numerous (12) sibling-in-law terms.—SC, CC, W-H, API, Pue, few terms for connections by marriage; Kamia 7, Yuma 6, Mohave 3. (7)

Age distinction of parent's siblings of same sex as parent. RY, W-H, API, SC.

Social

Wife purchase. SC, W-H.—Absent, RY, API, Pue, prob. LC.

Patrilocal residence. SC, RY, W-H, API.—Matrilocal, Pue, Navaho.

Parent-in-law avoidance, LC, CC, Navaho, Apache.—Absent, SC, RY, W-H, API, Pue.

Sibling-in-law avoidance. LC (?).

*Respect shown elder siblings in avoiding sexual references.

Death

Burial. API, Pue, some LC.—Cremation. SC, RY, W-H, some LC.

All property destroyed. SC, RY, W-H, API.—Not all, Pue.

Name of dead taboo. Same as last.

Games

Hidden-ball game. Pue, API, W-H, RY. Abs. SC, CC.
4 tubes. Pue, API. Abs. RY.
Guess for third tube. Pue, API (?).
Score 10-6-0-4. Pue, API.
Tubes marked end-middle-both-ends (or 2 ends). API, (Pue, on dice).
Tubes named old man, etc. API.

Dice—three in number. Pue, Navaho, W-H (recent?). Abs. API, SC, CC.
Cane splints. Pue.
*Score 4-1-1-4.
*Tally on ground, no counters.
*Erase (subtract) in tallying.

Foot-ball race. SC, API, Pue. Abs. RY, W-H.
Ball. SC, API. Stick instead of ball, Pue.
Four runners to side. Pue. One or indefinite, SC, API.

Shinny, with *hoop. API, double ball. Abs. RY.
Played by women. CC, API. Men's game, RY.

Constellations

Mountain-sheep, Orion's belt. W-H, R-Y, SC (Diguello).
Antelope, Betelgeuse.
Arrow, Sword hilt.
Dog, Sirius. Walapai, Sirius or Bellatrix is coyote.

Cactus-fruit gathering crook, Ursa Major. W-H.

Pole carrier, Scorpio (?). W-H.

Buzzard, Altair (?). SC.

*Quail.

*Jackrabbit.

Woman with children, Pleiades. All Yuman, Hacha, meaning usually unknown; Luis., girls; Walapai, coyote's or hat's daughters.

Not moving, Polaris. W-H, API.

Calendar

Year begins with cactus harvest. LC, API.

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171 Year of 13 moons. CC, W-H, API, some Pue; Enki, Diegueño, 6 repeated. Absent, LC.
Part of these named from constellations. W-H.
Less than 13 periods (?)—LC, 6; SC, Luiseño, 8, Juaneño, 13.

Ritual

Girls' puberty fast. SC, RY, W-H, perhaps LC.—API, seclusion, no fast; Pue, lacking.
Girl's puberty dance. SC, API, CC, perhaps LC.—Absent, RY, W-H, Pue.
Menstruating women forbidden deer meat. SC, CC, W-H.
Victory dance, scalp on pole. SC, CC, RY, W-H, Pue. Abs. API, perhaps LC.
By both sexes. CC, RY, W-H, Pue, API.
In circle. CC, W-H, API, Pue.
*Falling of scalp fatal to dancers.
Gourd rattle. RY, (W-H), API, Pue.
Cocoon rattle on knee. Yaqui-Mayo, API. On handle, CC. Neither, SC, RY, Pue.
Dancing on plank over pit, singly. CC (foot-drum).
*Holding pole.
Ritual number four. RY, W-H, API, Pue; prob. LC; SC, variable.
*Soul is blood.
Rain-making with amulet. CC, API.

Shamanism

Spirit quest. W-H. Absent, RY, API, Pue.
Ventriloquism in caves. LC, (W-H). Absent, SC, CC, RY, API, Pue.
Spirit enters shaman (possession without utterance). W-H. Absent, RY, API, Pue, CC.
Shaman lays on hands, breathes. RY.
Shaman sucks or blows through tube or hands. LC.

Myths

Death from coyote and insect. CC.
Coyote's child first victim. CC.
Fire from fly. SC, RY, API.
Sun's daughter. W-H.
Gambling for body. SC, RY, W-H, API.

LIST 2. LOWER CALIFORNIAN TRAITS OCCURRING AND LACKING AMONG THE SERI

A. Waicura traits which are also Seri.

Cane balsa: used in open sea.
Curved wind-break, unroofed, as dwelling.
Nose pierced (allegedly).
Turtleshell receptacle.
Little division of labor: cooking by both sexes.
Pitahaya not preserved.
Pitahaya seeds re-eaten.

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Fishing with harpoon only; no nets or hooks.
Singeing and roasting on open fire; no boiling of food.
Mother-in-law taboo.
Shamans use caverns and ventriloquism.
Shamans suck or blow.
No special shamanistic treatment for rattlesnake bite.
Girls' puberty ceremony.
Women's child-bed restrictions ("ceremonies").
Readiness to laughter and merriment.
Inclination to pilfer, lie, slovenliness, and filth.

B. Waicuru-Seri traits found also over a larger area.

Men wear hair long.
Net-like carrying-bag of agave fiber.
Bow long and nearly straight.
Forewhafted cane (reed) arrow.
Earth-oven for agave.
Hair cut in mourning.
Long distance travel by running.

C. Waicuru traits not occurring or not reported among the modern Seri.

Wood raft.
Buckskin sandal.
Complete absence of roofed dwellings.
Absence of pottery; gut or bladder for transport of water.
Turtle shell only cradle.
Women's front and back apron.
Men carry on heads, women with tumpline.
Forehead protected by high piece of buckskin.
Men cross, women stretch legs in sitting (Seri variable).
Litter for transport of sick.
Ear piercing and enlarging.
Absence of fermented drink.
Marriage to wife's sisters.
Shamans of both sexes.
Shamans wear human hair mantle or wig.
Shamans blow or suck through tube (Seri, hands).
Shamans extract pain object.
Bleeding and ligaturing for sickness.
Boys' puberty ceremony.

D. Lower California traits (other than Waicuru), mostly Cochimí or unlocalized, not occurring or not reported among the Seri (Olaviguro, Venegas)

Cabin-like arbors (*ramparados*) as house.
Pericú: cape or mantle (*capotillo*) in addition to woman's front and back apron.
Cochimí: front apron of reed, back of buckskin.

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North of Cochimí: cape of otter, rabbit, or jackrabbit fur (*piel*); woven rabbitskin blanket?

Buckskin sandal.

Guaicura of Loreto: head net.

No fermented drink.

Winnowing and parching trough (*bateo*) of water-tight reeds (basketry) or palm wood (carved).

Round (coiled basketry) dish (*plato* or *cocudillo*, Cochimí *adda*), for food, drinking, and woman's hat.

Agave fiber net hung from forehead or pole to carry children (except Pericú).

Pericú: cradle a deeper trough (*bateo*).

Agave fiber net (from forehead?) for carrying (fruit)

Deer head decoy.

Curved throwing stick for rabbits.

Rabbit nets.

Fish nets.

Balsa of 3, 5, or 7 light logs, middle longest; used to 4-5 leagues from shore.

Bone awl.

Guaicura: marriage ceremony is exchange of a trough and carrying net.

Other tribes: dance at marriage.

Monogamy; only Pericú polygynous.

Husband has absolute authority over wife.

Levirate.

Ears (and noses) of boys pierced.

Pericú: creator called shaman.

Guaicura: creator of food (pitahaya and fish) comes from north, on east coast teaches the making of shamans' mantles, returns north.

Cochimí north of 30°: impersonator of creator comes from hills, with men eats food prepared in arbor by women. Similarly, return of dead from north impersonated, women retire, men eat food.

Shaman's wig or cape of human hair, from head to feet.

Pericú: add head-dress of deer tails to same.

Cochimí: add two belts of deer hoofs to same.

"Conjuring" with boards (*tablitas*) bearing designs.

Curing by sucking through joint of cane.

Burial or cremation (as convenient? varying according to locality?)

Mourning commemoration, rude figure of dead made of branches on pole, lauded by shaman.

No moon-sequence calendar, but six named periods in year.

LIST 3. CULTURAL RESEMBLANCES AND DIFFERENCES OF GILA PIMA AND RIVER YUMAN TRIBES

A. Gila Pima and River Yuman common traits

Wooden mortar, with long wooden or stone pestle, for mesquite.

Absence of basketry seed-beater.

Type of planter and ("weaving sword" shape) weed-cutter (Russell's "digging-stick" and "hoe").

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Flood irrigation by one Pima village and Kwadhak (canal irrigation by other villages).
Wheat growing very early of importance.
Arrowweed bins or storage baskets.
Arrows of arrowweed, without foreshaft or head.
Few stone arrowheads.
"Potato-masher" type of war club.
Paddle for pottery making.
Cradle of wooden "ladder" type, with wicker basketry hood.
Metate flat, not grooved, with long mano; fairly shaped.
Head ring of willow bark for carrying.
Stone axes not made (prehistoric ones used by Pima for metate dressing).
House earth-covered, resting on 4 forked posts (Yuman, side posts too and rafters; Pima, bent willow frame).
Sweat-house lacking.
Man's breech-clout, woman's apron kilt, of inner bark of willow.
Men's hair long, unbraided, in "skeins" or gummed pencils.
Women's hair loose, cut in front.
Hair treated with plaster of mud and mesquite gum.
Face paint mostly arranged vertically below eyes.
Nose piercing of brave men.
Low aesthetic sense or interest, lack of finish in manufactures.
Flageolet (flute)—Pima from Maricopa.
Coiled basket used as drum—Pima from Maricopa.
Ring-and-pin game of gourd or pumpkin rings, with spiral scoring design.
Girl's puberty rite, 4 days' seclusion (Pima also dance, Mohave not).
Dance formation: men and women in two lines, back and forth (Pima, puberty dance).
No wife purchase.
Patrilineal and patrilocal descent.
Patrilineal sibs (Pima, 4 or 5, under moieties; Yumans, many); these have totemic reference but not names; designated by common names used by members (for fathers by Pima, for women by Yumans).
Slaves (Pima, children; Yumans, young women).
Chief's liberality.
Secondary names of men often refer to female genital organs.
Rigid taboo of names of dead.
Salt forbidden as ritual restriction.
Absence of altars, of specific dance regalia, and of masks (except Pima Navitco, imported?).
Shamans do not seek dream or trance.
Shamans brush and spray in curing.
Shamans killed for failure.
Myth episodes or tendencies:
Finding middle of earth.
Four tribes at first.
Rivalry of two first great gods.
Coyote sent on errand, fly makes fire, cremation (Pima actually bury!),

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Coyote leaps over two short men, steals heart of corpse.
Lengthy pseudo-historical tales of group wars.

B. Gila Pima traits not found among River Yumans

Canal irrigation.
Fermented drink of giant-cactus fruit or agave (northwestern limit of alcohol).
Pottery patterns after firing, of mesquite gum, slightly refired.
Coiled basketry; materials Typha, willow, Martynia.
Twilled basketry with lids.
Oval sifter of parallel rods.
Storage baskets, boiled, of willow and wheat straw.
Kiaho carrying frame: 4 sticks, hoop, half-hitch agave-fiber net (Mohave, 2 looped sticks, wound with cord).
Cotton, loom weaving, blankets, patterned belts.
Outer frame of house of bent poles.
Flat-roofed shade earth-covered.
Foot-ball race (Yuman, present but uncharacteristic, favorite game hoop-and-pole).
Women's double-ball shinny (Yuman single-ball by men).
"Relay race" by teams (not clear: Russell, pp. 173-4).
Dice with scoring circuit; giant-cactus wood, marked middle-end-both-none.
Hidden ball game of cañuto type, 4 tubes marked middle-end-both-none, called old man, old woman, score apparently 10, 6, 4, 0 (not clear, Russell, p. 177), 100 grains to game, stick set up at winning each game (Yuman, simple hiding in sand).
Sororate.
Moieties.
Gibs not exogamous (?).
Gib designations refer to words used for father.
Purification rite for year-old children.
Naming ceremony with godparents (Spanish?).
Youths trained four days in tribal legends.
Tear salutation.
Musical rasp.
Dance in circle, arms over neighbors' shoulders.
"Name song" begging.
Girls' puberty dance.
Girl at puberty, menstruating woman, work basketry.
Victory dance apparently without scalp pole.
Navitco rain dance (from south?).
Shamans extract disease object.
Shamans trained by being "shot" by older shamans.
Women shamans cure only abdominal disease of men and women.
Curing by songs of animal diagnosed as causing disease.
Curing by masked Navitco.
Stone tablets.

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Omina, feather-stick offerings.
Calendar sticks (year tallies).
Most of origin myth except as mentioned as similar to River Yuman.

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C. River Yuman traits not found among Gila Pima

House completely roofed with rafters.
Large fishing scoop of sticks.
Guessing game without tubes.
Kohot chiefs social entertainers and managers.
Same name borne by all women of one sib.
War as sport, with challenges, champions' contests, close-in mass fighting.
Cremation.
Mourning accompanied by singing, begins before death.
Mourning commemoration, with images and mimic battle.
Intra-tribal group disputes settled by regulated pushing match and stick fight contests.
Ceremonial induction of berdache into status.
Women may change sex socially.
Girl at puberty covered with hot sand.
Datura eaten by individuals (Pima, one song reference, Russell, p. 299).
Soul loss cause of disease.
Individual dreaming as basis of most religious functioning.
Dreaming largely of myth period, world origin, one sacred mountain, dying god, culture hero.
Many myth episodes and trends.
Song cycles: Tumanpa, Vinimulya, Nyohaiva, Raven, Salt, Deer, Turtle, Chuhuscha, Cane, Goose, etc.
Choice of cycles sung according to individual dreamer or learner, rather than function or occasion.
Musical style (Herzog, Journ. Am. Folk-Lore, 41, 1928).

Interpretation of the Comparative Data

Seri culture resemblances would expectably run along one or more of the following lines:

1. With the adjacent tribes of Sonora, of which, in default of direct knowledge, the American or Gila Pima may be taken as the nearest though imperfect representative. However, a considerable gap undoubtedly existed between these tribes and the Seri through the possession by the former of developed agriculture and cloth weaving. This gap would at once be apparent in a comparison made from the point of view of the Pima, Opata, or Yaqui. It need not exist from the Seri angle if Seri culture were essentially a reduced or impoverished copy of general Sonoran culture.

2. With the non-agricultural desert tribes of peninsular California. In this case, strongly preponderant similarity would be con-

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[71] clusive proof of a common origin or active communications across the Gulf of California.

3. With the Yuman peoples other than those of the peninsula. Among these the Colorado river tribes are agricultural and otherwise specialized. Of those who farm sporadically or not at all, the Yavapai, Walapai, and Havasupai[1] of Arizona are geographically nearest and in a similar though less extreme environment.

4. Of more distant groups, those of southern California come into consideration because of their semi-desert environment, lack of agriculture, contacts with the Yumans, and through including, in the Diegueño, a Yuman people. The central Californians and Pueblos should give a measure of basic Seri relationships respectively toward the Pacific coast and the classical "Southwest" of recent archaeology and ethnology. On the Apache, unfortunately, there are inadequate data.

The entries in list 1 summarize as follows:

	Agreements	*Disagreements*	*Surplus of Agreements*
Walapai-Havasupai	29	7	22
Gila Pima	31	12	19
Southern California	27	12	15
Lower California	18	3	15
Central California	18	5	13
Colorado River Yumans	23	16	7
Yaqui-Mayo	7	0	7
Pueblo	18	13	5
Peculiar to Seri, (*), 10			

Rather surprising is the high total of resemblances with the Gila Pima. It suggests that with systematic data available, the Papago and Sonora river Pima would show a culture fairly close to that of the Seri, except for agriculture, weaving, etc. Presumably the Opata and Yaqui-Mayo would be only a little farther removed, though in their case river valley habitats would add differences to those due to greater distance.

The peninsular California relations are somewhat puzzling. The greater number of listed Seri resemblances with southern as compared with lower California is obviously due to fuller data. The ratio of agreements to disagreements is probably more significant: about five to one for the peninsula, but two to one for southern California. The resemblance would be still greater if traits directly reflecting the environment had been included: such as cactus fruit diet, or use of turtle shell receptacles. Certain more detailed considerations arising from list 2 are discussed below.

[1] The Havasupai farm on a considerable scale, but appear to be essentially a Walapai off-shoot who have been able to add agriculture. For six months in the year their life is practically indistinguishable from that of the Walapai.

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Very notable is the high resemblance to the Yumans of Arizona, especially in contrast with those of the Colorado. Not only are there more agreements with the Walapai than with the Yuma and Mohave, but the excess of resemblances over differences is about three times as great. The divergence between the two Yuman groups would be still wider if the comparison had been two-way instead of one-way, on account of the river tribes possessing whole systems of cults, clans, etc., of which the Walapai, Havasupai, and presumably Yavapai are almost as free as the Seri. 171

The central Californians are geographically so remote that the only significant figure in their case seems to be the fair number of positive resemblances.

The Pueblo low net excess of agreements is surely significant. Had the comparison been the other way around, it would have yielded an overwhelming excess of disagreements.

As to Sinaloa, the rather scant and uncompiled data indicate its culture, from about the Sinaloa river southward, as probably in the main a dilution of that of central Mexico, just as its prevailing speech is generally accepted as having been a dialect of "Mexican" or Nahua. However, occurrences like that of the *palanca* or carrying pole in Sinaloa and among the Seri are evidences of connection in that direction also.

List 2 is a check on the Lower California part of 1 by reversing the comparison. On its face, it diminishes the Seri-Baja California resemblances. Evidently the Gulf formed a serious barrier to communications, and if the Seri came out of the peninsula, it was a long time ago. Puzzling is the fact that the Waicura, three to four degrees of latitude south of the Seri, show an excess of agreements; the Cochimí, directly opposite, an excess of traits not reported for the Seri. Different authorship of the Waicura and Cochimí records can hardly explain all of this difference. Quite surprising is the northern Cochimí account of a woman-deceiving impersonation both of the creator and of ghosts, which inevitably suggests a secret society of the Patwin-Pomo-Yuki type of north central California.[*] One would certainly not expect such a cult organization among the scattered, chronically hungry Lower Californians.

One tentative clue suggests itself. It is conceivable that the Seri came to Sonora from the peninsula when the Waicura, or a culture of their eighteenth century type, were still situated about latitude 29° or 28°, being subsequently dispossessed by Cochimí, or by cultural stimuli from the north, which resulted in richer local growths than have been taken for granted for the area. I am not ready to take 174

[*] The human hair wigs or mantles which covered the whole person, like the central Californian feather mantle or rope of the moki, etc., are another parallel, but are reported for the peninsula generally.

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104 sides on this hypothesis. Intensive analysis of the data may strengthen or eliminate it.

171 List 3 bears on the Seri indirectly through segregating Gila Pima culture into those constituents which are also River Yuman (including the Maricopa) and those which are non-Yuman and therefore likely to be old or generic Pima. It must be remembered that the Gila outpost division of the Pima nation were in immediate contact and friendly alliance with the Maricopa, whose dialect and customs indicate them as a river Yuman tribe rather recently extruded from the lower Colorado valley. The Maricopa are first mentioned by Kino and his associates, just before 1700, as on the Gila. It seems unlikely that they left the Colorado more than about a hundred years earlier. However, this would give three centuries of close association of the two tribes, before which there may have existed a period of less specific communications up and down the Gila.

The array of Pima-Yuman traits in section A of list 3 is rather impressive. Several have a somewhat wider distribution, but even such traits are usually centered, or most intensely developed, in the Gila-Colorado tract. It is probable that the Pima and Yumans contributed about equally to what they share. Traits like agriculture, irrigation, and pottery, which extend thousands of miles southward but stop with or just beyond the Yumans, have certainly moved from the Gila to the Colorado. On the other hand, in some cases the Pima admit adoption of Maricopa elements. The myth-episode of the making of fire by the fly and coyote's theft of the heart must have originated among the cremating Yumans or southern Californians and been adopted with something of a wrench by the interring Pima.

Sections B and C of the list give the traits not shared by the two groups. The Pima list is about twice as long as the Yuman one. This appears to be due only in part to the fullness of Russell's monograph. Pima culture seems quantitatively the richer, River Yuman the more specialized. It will be noted that the Yuman traits include very few in material culture or technology, interest in which, as in ritual, seems to have been suppressed by the Yuma and Mohave in proportion as they became absorbed in their peculiar war customs and their individualistic dream religion. Again, as Herzog has pointed out, River Yuman music has developed an unusually well marked style of its own.[39]

The bearing on the Seri is this. Half-a-dozen non-Yuman Gila traits (list 3B) recur among the Seri—more if the several features of the dice and hiding games are counted separately; none of the non-Pima River Yuman traits (3C) are Seri. But this does not mean that the Seri are closer to the Pima than to the Yumans generally, because the desert Yumans, as represented by the Walapai and Hava-

[39] JAFL. 41:188-251, 1928.

2: Kroeber E-5 (1930) 1931 NU31 Seri NU31

supai, possess as many Seri traits (list 1) as do the Gila Pima. In other words, Seri culture is definitely related both to Pima and to the generalized, basal, and presumably original Yuman culture—which is mainly situated in a similar environment. On this foundation the River Yumans then reared their own culture through the adoption of agriculture, the reduction of technology, and special growths in spiritual culture. This River Yuman culture however did not appreciably influence the Seri, because its localized specializations remained impracticable, unacceptable, or unknown to them.

Here ends the comparative discussion of Seri culture. Tentative as the findings are, I trust that the examination has at least helped to shed light on problems of the area to which the Seri belong.

2: Kroeber E-5 (1930)1931 NU31 Seri NU31

SUMMARY AND CONCLUSIONS

121 Knowledge of the Seri is still in its infancy. McGee's actual
114 observations are excellent but slender in range. He has interwoven them with conjectures, some of which are erroneous and others unproved and doubtful. Intensive study of the Seri will be difficult, chiefly for physical and practical reasons, but, to judge from such explicit data as are in hand, should prove them to be a tribe unusually interesting indeed, yet fundamentally similar to others in the same region. So many of their known traits are shared with one or another of these tribes, that it is practically precluded that complete investigation will leave the Seri as a unique people or even as one set widely apart, except in their historical fortunes.

13 The most distinctive thing about the Seri is their environment.
182 This is extremely arid and lacking in water supply, but not desert in the ordinary, untechnical sense. Botanists describe it as a succulent vegetation desert. It is fairly well stocked with food inland and rich in food along shore. This territory is able to support a fair sized population, but scatters it and keeps it from settling down. The land is also inhospitable and difficult to strangers who are not ready to adopt the Seri mode of life. This fact has helped preserve Seri ethnic integrity and culture to an unusual degree. A considerable fraction of original Serian territory is wholly unoccupied by civilization today, a full three centuries after its frontier was settled. The Indian neighbors of the Seri, all being farmers in fertile valleys, had no more incentive or ability than Caucasians to penetrate Seri territory sustainedly.

171 Across the Gulf, the peninsula of California presents a very
174 similar environment, and was inhabited by tribes of very similar subsistence and residential habits, culture level, and temperament. But the Baja Californians differed from the Seri in being so situated, with reference to the rest of the world, that the length of the peninsula cut them off, except in the northern portion, from nearly all outside relations. Each group in the peninsula thus had contacts and stimuli only from others of similar culture. The Seri, on the contrary, having long been surrounded on the landward side by peoples of higher cultural level, were able to exploit this difference, in part by adopting cultural traits from their neighbors; and perhaps still more largely by preying upon them economically; while their habitat afforded them a refuge from destructive reprisals. Such may have been the condition in pre-Columbian days. At any rate it has been such since the coming of the Spaniards, and has made the "history" of the Seri different from that of the Baja Californians.

174 Three islands, Tiburon, San Esteban, and San Lorenzo, form stepping stones from Seri mainland to the peninsula. The water gaps between them are navigable to native craft and have been navigated

2: Kroeber E-5 (1930) 1931 NU31 Seri NU31

by them at times. This raises the question of whether the Seri may not have reached their habitat from the peninsula, or possibly the reverse. The solution of this problem depends on an analysis of full data on physical type, speech, and culture content, and only a partly conclusive answer, discussed below, can as yet be given. In general behavior and temperament, Seri and peninsular Californians seem to have been strikingly alike; but this fact can not in itself be construed as evidence of common origin, because the similar psychology may be largely determined by similar residence and subsistence habits resting in turn on almost parallel environment; much as pastoral nomads or mariners in whatever part of the world, and with or without historical connections, are likely to exhibit analogous mental attitudes in contrast with rural or urban populations.

In any event, it is wholly unproved that the Seri possess a native endowment which is more animal-like, more dominated by instinctive impulses and less capable of cultural development, than other peoples'. In fact the improbability of such an assumption is indicated by their possession of culture traits, like certain games and their kinship system, which they either share with neighboring tribes or have developed into rather high specialization. The meagernesses of their culture are therefore evidently due to factors in their particular history or geography rather than to congenital deficiencies or abnormalities. This does not mean that it would be easy to convert the Seri to the mode of life of Pima or Mexican. Habits of irresponsibility and unsettlement once established, even through part of childhood only, are notoriously difficult to alter. Witness the Gypsies. However, such practical habit difficulties are of course no evidence as to quality of endowment.

The modern Seri are the amalgamated remnants of some three or four of a half dozen closely related Serian groups formerly recognized. The preponderant one in the fusion of these groups is likely to have been that which held Tiburon and the fronting mainland, on account of better preservation of their numbers and habits in the relatively inaccessible island refuge.

Seri physique is distinctive in physiognomy, expression, and habitus, as would be expectable in a people sharply set off from its neighbors in practises and attitudes. The measurements available show no very marked differences of gross anatomy from neighboring tribes, either in stature, head shape, or nose proportion. The head may be somewhat rounder than among Pima and Yaqui; the difference in body seems more to be one of greater slenderness than of greater height. The Seri abilities to endure hunger and fatigue and to run great distances are faculties possessed by nearly all tribes of the southwest United States and northwest Mexico.

The Seri language is intrinsically and markedly tonal, more given to consonontal accumulations than the neighboring Uto-Aztecan and

2: Kroeber E-5 (1930)1931 NU31 Seri NU31

197 Yuman dialects, and possessed of some relatively rare sounds like *f*. It bears an indubitable relation to Yuman, as was assumed forty years ago, but the relationship is remote enough to indicate that the Seri have had a history apart from that of the Yuman tribes for a long time, estimable at a thousand years at the least, to judge by the rate of change of most languages. The Yuman idioms seem to fall into two primary groups, Yuman in the narrower sense, in Arizona, southern upper California, and northern lower California; and Cochimí in central lower California. On Cochimí, which is generally reputed extinct, data are very scant. If this group of dialects showed markedly greater resemblance to Seri than do the other Yuman languages, a derivation of the Seri from the Cochimí across the Gulf of California (or the reverse, if Cochimí proved more different than Seri from Yuman) would be an almost inescapable inference. Unfortunately, the available data are too scant to allow of a definite decision. On their face, they seem to make out Cochimí and the narrower Yuman group as about equally distinct from Seri.

171 Comparative analysis of the known specific facts of Seri culture, while impeded by inadequate information on many tribes, especially in Mexico, shows positive relations in all directions, but outstandingly with three peoples: the Pima, the Arizona desert Yumans, and the Lower Californians.

The Pima in question are those of the Gila river, the remotest of their nation from the Seri, agricultural, and demonstrably subject to some cultural affection by the Yuman tribes of the lower Colorado. Quite expectably therefore they lack many elements of Seri culture besides those which they share; not to mention a large stock of their traits not possessed by the Seri. Had we satisfactorily specific data on more southerly Pima divisions, such as those of the Sonora river, who were immediate neighbors of the Seri, there can thus be little doubt that an even larger proportion of the Seri cultural inventory would be found among them. More or less the same would probably hold for the Yaqui. These adjacent cultures would seem to have contained most of Seri culture plus increments such as agriculture, cloth weaving, and others.

The Arizona desert Yuman tribes, the Yavapai, Walapai, Havasupai, live farther from the Seri, in fact beyond even the Gila Pima. It is therefore significant that they show almost as many cultural agreements with the Seri, and fewer disagreements. They are perforce an almost non-farming population, except in a few spots. It is clear that they and the Seri have jointly preserved many features of an old, non-agricultural, desert-adapted culture. The Yuman tribes of the lower Colorado are much more different, though their geographical distance from the Seri is no greater. They possess definitely fewer and lack more Seri traits. This is not only because they

2: Kroeber E-5 (1930) 1931 NU31 Seri NU31

farm, but because they have secondarily specialized their culture away from the old Seri-Walapai substratum. 171

The Baja Californians must be reckoned as having participated in the same basal, low-level, desert culture, though of course, like every other people, with certain variants and developments of their own. That we can name fewer Seri traits in their culture than in that of the preceding groups, is probably due to the less store of our knowledge of them. More significant of relationship is the smallness of the number of Seri traits which they are known to lack. It is entirely possible that if there existed adequate information for both sides of the Gulf, Seri and Cochimí similarity would prove to be the closest of all. But at present this possibility cannot be either conclusively proved or disproved.

Seri similarities with southern and even central California are fairly numerous, and can be attributed partly to the common non-agricultural subsistence, which would tend to induce the adoption or retention of similar cultural traits. On the other hand, the basic farming life of the Opata, Mayo, and north Sinaloan peoples must have operated at many points in the opposite direction in spite of their geographical nearness. Pueblo culture is so highly specialized that its mass would expectably show little kinship to Seri, and such is the trend of the available comparative data.

The Seri thus relate culturally to other peoples much as might be anticipated from their geographical position and subsistence opportunities. The Seri problem consequently has to be removed from the category of those which hold out a hope or illusion of being particularly significant for the solution of basic questions or broad hypotheses. It is essentially a problem of specific local ethnography, with wider significances revealable only by impartial comparative studies; but of special interest because of the relatively well-preserved status of parts of old Seri culture and the human appeal of three centuries of outlaw history. The thorough study of this culture will involve much grinding physical hardship and possibly some danger. It is to be hoped that when the work is undertaken, it will not be in a spirit of personal adventure, with emphasis on the external difficulties to be overcome, but with a serious desire and competence to secure facts and understanding. 121

ABBREVIATIONS USED

AA—American Anthropologist. 113
AMNH-AP—American Museum of Natural History, Anthropological Papers. 128
BAE-B—Bureau of American Ethnology, Bulletin.
BAE-R—Bureau of American Ethnology, Reports.
JAFL—Journal of American Folk-Lore.
UC-PAAE—University of California, Publications in American Archaeology and Ethnology.

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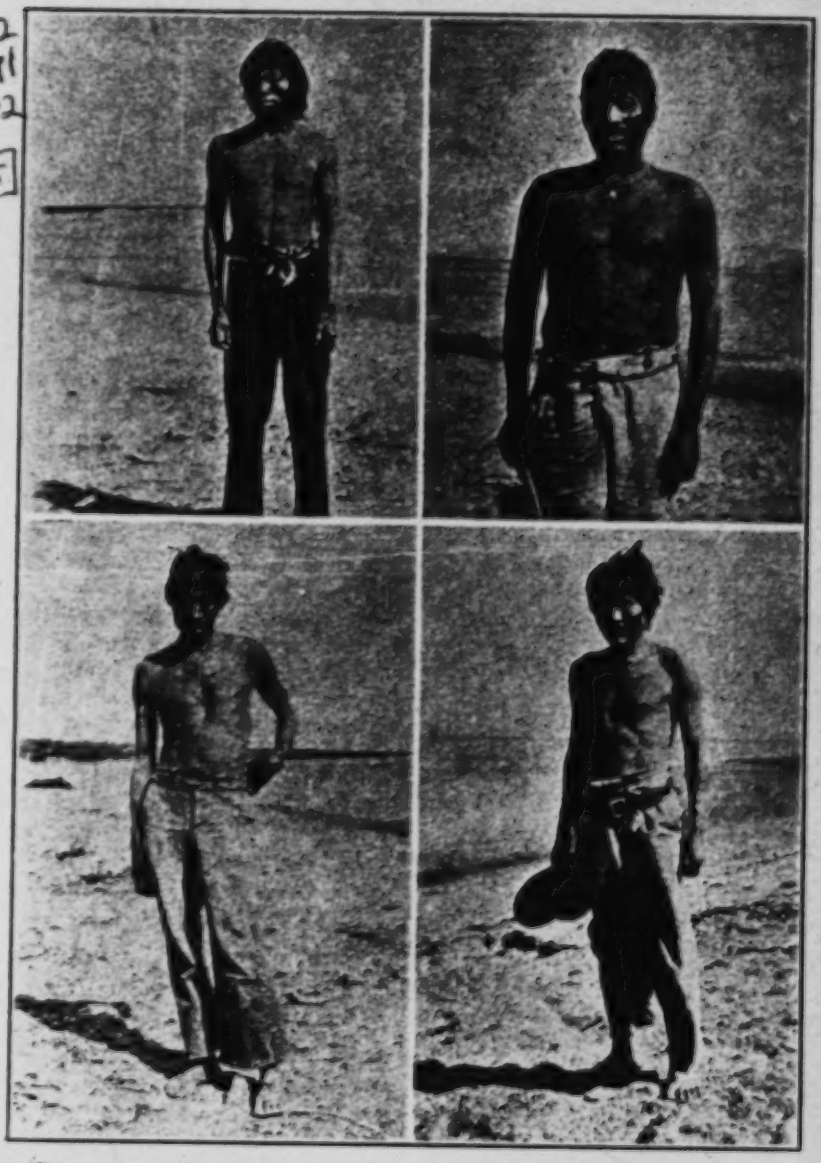

FIG. 1 (upper left). *Young man with long hair.*

FIG. 2 (upper right). *Chico Romero, official Seri chief and principal informant. The largest individual seen.*

FIG. 3 (lower left). *Elderly man of the apare Seri type.*

FIG. 4 (lower right). *Native policeman for the Mexican government.*

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FIG. 5 (upper left). *Maria, wife of Chico, with their baby.*

FIG. 6 (upper right). *Heavier Seri type on beach of Tiburon Island, a bay of El Infiernillo in background.*

FIG. 7 (lower left). *Man, youth, and boy.*

FIG. 8 (lower right). *On Punta San Miguel, mainland, mangroves in background.*

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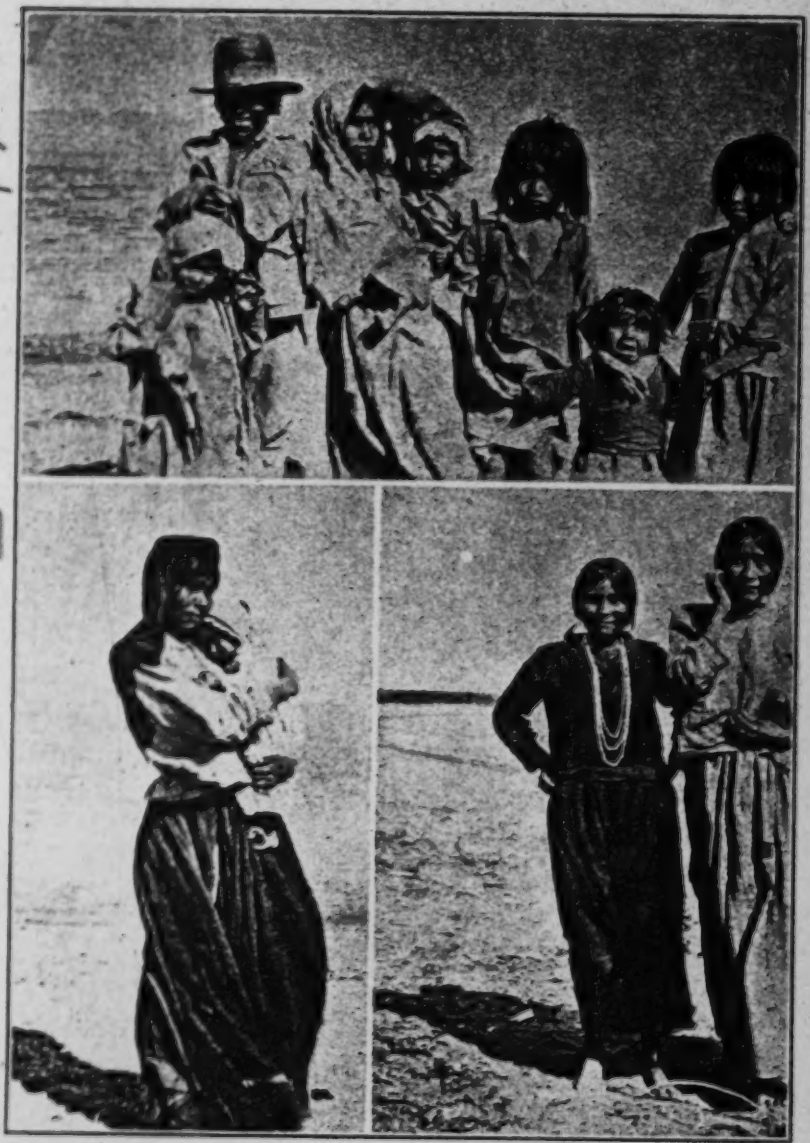

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FIG. 9 (upper). *Seri children showing variety of expressions at camera experience.*
FIG. 10 (lower left). *Young woman with sickly baby.*
FIG. 11 (lower right). *Two girls, the shorter unmarried.*

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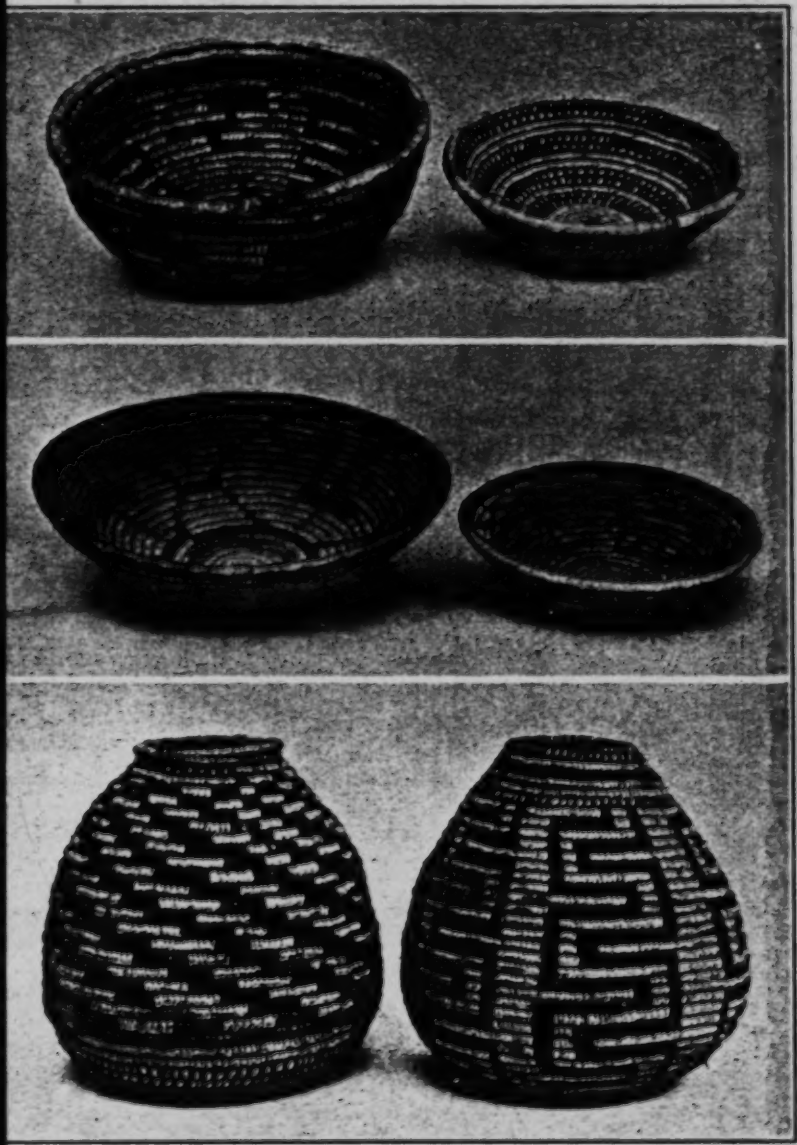

FIG. 12. *Seri Baskets in Museum of the American Indian, Heye Foundation.*
Nos. 15—4279, 4285, 4295, 4288, 4247, 4249.

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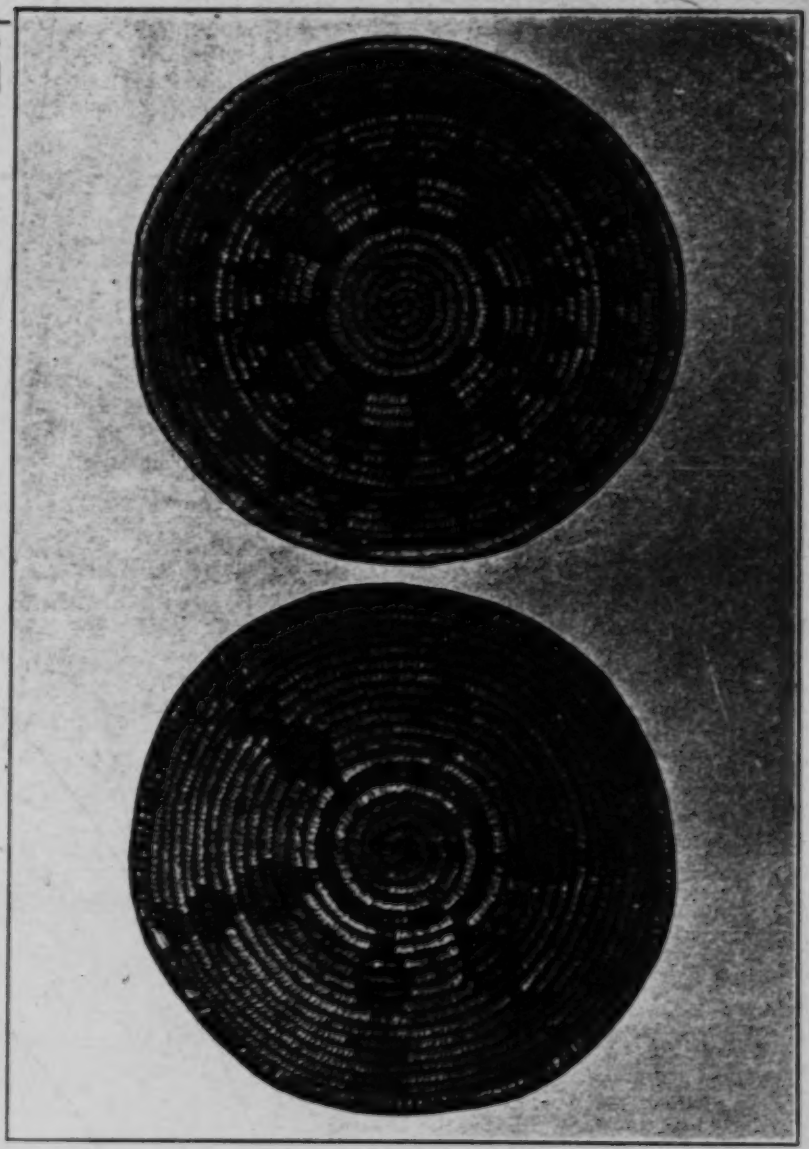

FIG. 13. *Seri Baskets in University of California Museum of Anthropology.*

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116 TEXTS--a full set of pages from each processed source, arranged in page order, as a means of establishing the context for any particular slip. Sets are arranged in the numerical order of the sources. See also:

Literary texts 599

3: Davis & Dawson E-5 (1922-1940)1945 NU31 Seri NU31

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THE SAVAGE SERIS OF SONORA—I

By EDWARD H. DAVIS AND E. YALE DAWSON

WHEN the Seri Indians pass into extinction, "good riddance" will be voiced by many a Mexican, for centuries of warfare against the invaders of their inhospitable lands have made this small tribe notorious among the aborigines of Mexico. Many people will be ignorant of their passing, but a few of us even now watch with some regret the losing struggle of their diminishing numbers against the spreading civilization that tramples out the wild things and destroys the natural features of the earth. With the Seri goes a link with a past, primeval age of nature in America, for these are a strange and primitive people, a people whose lives and habits assign them to the initial place in the scale of cultural development among American Indians, and hence to the lowest recognized phase of savagery.

In 1540 one of Coronado's officers was the first to capture and bring into the army encampment in Sonora a Seri warrior, an Indian so large and tall that his stature created a sensation among the Spanish soldiery. It was three and a half centuries, however, before the Seri tribe was finally subjugated by an invading force, and then only after the slaughter of nine-tenths of its population.

In modern times, though the encroachment of settlements has forced the Seris into domestic contact with the Mexican people, few outsiders have ever come to know them. Until the fishing village of Kino was settled some ten years ago, there were only two men they counted real friends among aliens. The senior author was one of those. Today the Seri not only must tolerate the encroachment of the Mexican, but must suffer from imported diseases which are gradually destroying him. The present life of the Seri is but an echo of its past, but in this modern world the habits of the survivors of America's most primitive people are none the less astonishing. Their gradual acquisition of modern implements and materials has gone along with centuries of warfare and bloodshed, and their submission to law entails a long story of violence. Before considering these more recent phases of their history, however, let

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THE SAVAGE SERIS OF SONORA—I

By EDWARD H. DAVIS AND E. YALE DAWSON

000 us first acquaint ourselves with the life and habits of the Seri before the Spaniard trod upon his thorny land.

131 His homeland speaks first of isolation. Tiburon Island, in the Gulf of California, and the adjacent coast of Sonora are pro-

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[283]

FIG. 1. CHICO ROMERO, SERI CHIEF WEARING A KILT OF PELICAN SKINS WHICH USED TO BE THEIR ONLY MATERIAL FOR GARMENTS. NOTE THE CORD MADE OF HUMAN HAIR CARRIED IN THE HAND.

tected on one side by stormy seas and on the other by even more forbidding deserts. The natural isolation of this habitat set its people apart from all other human beings, and the two or three thousand Seris, wandering between their desert island and the mountain-

[p.193(B)]

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FIG. 2. THE PELICAN SKIN ROBE
A TYPICAL WOMAN'S GARMENT BEFORE THE ADVENT OF THE COTTON CLOTH AND BAGS THAT REPLACED IT.

131 bounded coastal plain, lived a life so independent and so oblivious of the outside world that they might well have been on another planet.

182 The hard, inhospitable natural environ-
105 ment afforded by Seriland long ago moulded the characteristics of its people and their whole mode of life. The distance between reliable food sources in the sea and supplies of fresh water created a pedestrian habit whereby they acquired a remarkable fleetness of foot and tremendous physical endurance against thirst and weariness on the trail. The monotonous sea-food diet induced a wandering, roving life in search of game and vegetal produce to supplement their meager rations. They became a homeless, burden-bearing people, wandering in family

[p. 194(A)]

105 groups or clans between the waterholes and
182 their temporary dwellings by the sea, chasing for game or searching for cactus fruits, sleeping wherever weariness overtook them, or where the successful end of a hunt left them gorged and drowsy. Under a climate where frost is almost unknown they needed no protection except from the sun, and built no other dwellings than their brush-heap jacals (Fig. 3). Living in animal-like savagery, without commerce or industry, the Seri's every bodily character and function were directed toward the provision, day by day, of the food and water necessary for life.

312 Potable water, a commodity so abundant in most regions as to divert conscious attention from its paramount role in physiologic function and in industrial economy, attained in Seriland the primary place of importance because of its rarity. In that arid land it is scanty to the extreme. Two thirds of the meager supply is confined to a single rivulet in the interior of Tiburon Island (Fig. 4). Because of this and other widely separated aguajes within the island whose shores provided the greater part of their food resources, the Seris early found this island the most tolerable habitat in their desolate realm.

225 The most conspicuous single article in the
[262] dietary of the Seri, and undoubtedly that which first determined the location of his habitat, is the green sea turtle which is abundant throughout the Gulf of California, but particularly so in the narrow channel between Tiburon Island and the mainland. There the shallow lagoons abound with its marine grass food plant, and the sandy beaches provide optimum conditions for egg laying and hatching. In consequence of this natural provision for abundant food, easily obtained, perhaps half the aggregate life of the Seri tribe came to be spent within easy reach of the feeding and breeding grounds of the turtle.

[361] The most extensive and permanent of all Seri communities was established on the channel side of the island, just back of the lagoon in which the turtles feed and whose sands provided eggs and the succulent flesh
225 of newly-hatched turtle young. When fe-
501 males could not be captured at the laying grounds, the big chelonians were speared

[p. 194(B)]

[text continues on p 195(B)]

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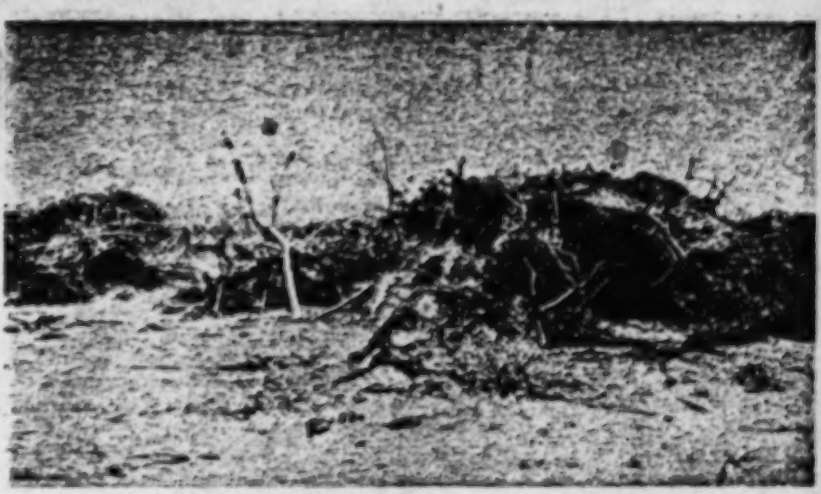

FIG. 3. THE SERI HOME—A BOWER OF BRUSH

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FIG. 4. AN AGUAJE ON TIBURON ISLAND
THE PRINCIPAL WATER SUPPLY AND SOURCE OF THE CARRIZO REED USED IN CONSTRUCTING THE BALSA.

[p. 195]

3:Davis & Dawson E-5 (1922-1940) 1945
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225
501 from graceful balsas made of carrizo canes bound together with mesquite fiber cords (Fig. 5). On these buoyant craft, too, they navigated freely the narrow but stormy

[p. 195(B)]

3:Davis & Dawson E-5 (1922-1940) 1945
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225 channel separating their island habitations
501 from those on the mainland.

In pre-Columbian times the turtle fisheries
614 of the channel must have supported several

[p. 195(c)]

614 hundred Seris at a time. They lived in maternal groups or clans in which the elder females were of great prominence in the management of everyday affairs. When, in 342 the wanderings of a family a new camp was [462] decided upon, the elder matron usually erected the jacal alone, without the aid of men or boys, gathering the long poles of the ocotillo or the branches of desert trees and fashioning them into an arched framework over which a covering of brush, and often later of turtle shells, served to give protection from the desert sun. After the house- 361 hold was prepared, she took her place within 592 easy reach of the meager and squalid family possessions, and around this nucleus other matrons and their children gathered in the course of a day or two. It was usually three or four days, and sometimes a week, before the brothers and husbands came wandering in from their roving search for food to take their places at the new camp site.

482 From the turtle fishing camps on the chan- 312 nel, the nearest fresh water was at a distance

[p. 196(A)]

3:Davis & Dawson I-5 (1922-1940) 1945
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312 of four miles by a rough and stony trail. In
482 other parts of the island, habitations were occupied as distant as 15 miles from the nearest watering places. Under these conditions the Seris became essentially and primarily water carriers, and all their other industries were subordinated to this function. They learned to economize on water carrying by gulping incredible quantities on their occasional visits to the aguajes, yet, more than half of the water required in their vital economy was consumed after transportation over distances of four to twelve miles. The
[271]
312 women were ordinarily the water bearers and
482 for this important business manufactured a
323 distinctive vessel for the purpose. From fine adobe clay they hollowed, expanded and shaped by manipulation with the fingers and without the aid of implements of any sort, a large olla of remarkably light weight in proportion to its capacity. Its mouth was made no larger than the hand that shaped it, thus to prevent spilling on the trail. From
482 yucca fiber a cylindrical cushion was also

[p. 196(B)]

[text continues on p. 197(B)]

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FIG. 5. THE NATIVE BALSA MADE OF CARRIZO REEDS

PHOTOGRAPHED IN 1922, THIS WAS THE LAST BALSA MADE BY THE SERIS. IT IS ONE OF THE SMALLER GUYMAS BALSAS FROM WHICH TURTLES WERE SPEARED WITH THE LOCO-GRAFTED IMPLEMENT PICTURED HERE.

[p. 196(c)]

3: Davis & Dawson E-5 (1922-1940)1945 NU31 Seri NU31

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FIG. 4. DOMESTIC SCENE IN A SERI VILLAGE

[p. 197(A)]

482 fashioned to fit the head (Fig. 7) and to aid in balancing the forty- to fifty-pound water-filled olla as it was carried over the rough and hilly trails from aguaje to jacal. (It is not certain whether the use of the shoulder pole, or palanca, was a part of original Seri culture, but in more recent times two water vessels were frequently carried, hung from either end of the notched pole.)

396 [462] While the tasks of supplying water and of manufacturing the vessels used in its transport were generally delegated to the women and children of the household, the building of the balsa was an undertaking that required the co-operation of the entire group. The carrizo canes were first gathered by the women and boys from the patches growing about the few permanent fresh waters of Seriland (Fig. 4). The leaves and tassels of the canes were removed by hand and the canes tied in bundles for carrying to the shore. There the men proceeded to lay, overlap, interlace and bind the canes into a larger and larger cylindrical bundle, tapering at

[p. 197(B)]

3:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

396 the extremities. Throughout the process the
cord used for lashing was laboriously made
[283] by hand and mouth by the women who ob-
tained the fibrous raw material from mes-
[462] quite tree roots, from the yucca or the
maguay. Three of the finished bundles were
lashed together to form a watercraft some
thirty feet in length and of four-foot beam.
These large balsas were buoyant enough to
carry several members of a family across El
Infiernillo channel. One-man balsas were
also made (Fig. 5) principally for use in
turtle fishing.

225 Except during the egg-laying season
411 turtles had to be sought from the balsa. The
Seris lacked tool sense in the extreme, but
their clumsy brains had devised a harpoon
for use against the turtle. The hard, pene-
trating point was commonly made of native
ironwood, but may also have been the sharp-
ened tooth of a sea lion or the shin bone of
a deer. It was fitted and firmly cemented
with mesquite gum to a short, hardwood
foreshaft whose rounded end fitted into the

[p. 197(C)]
[Text continues on p. 198(B)]

482

FIG. 7. CARRYING WATER FROM A DESERT AGUAJE

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FIG. 8. STRETCHING AND DRYING THE PELICAN SKIN BOBE

[p. 198(A)]

S:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

225
[411] ten- to twelve-foot main shaft. A stout cord was knotted to the foreshaft and carried along the main shaft to the hand of the user. When, from the quietly floating balsa, a

[p. 198(B)]

h:Davis & Dawson E-5 (1925-1940) 1945
NU31 Seri NU31

225 turtle was seen lying in the water, the fisherman stealthily brought his spear-point over the carapace of the unsuspecting animal and then, with a sharp thrust, drove the point

[p. 198(c)]

3:Davis & Dawson E-5 (1922-1940) 1945
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225 through the shell. The foreshaft was jerked out at the first movement of the animal which was held by the fisherman's line until tired, after which it was either driven ashore or lifted onto the balsa.

No sooner was the quarry landed than the soft undershell was crushed and broken loose with a cobblestone "hupf," and then torn off
264 by the tribespeople with the impetuous fury of blood-crazed carnivorous beasts. The entrails and soft, bloody gore were first consumed, followed, depending upon the proximity of the last meal, by the firmer flesh, all but the infants of the household pounding, tearing and chewing their raw, grisly
[252] chunks, stopping to singe or half roast larger pieces only if near satiety. If immediate consumption of the prey was not accomplished, the remnants were carried to the rancheria and there lifted to the top of the jacal to soften in the sun. The reeking carapace was often left indefinitely beside the

[197]

Photo by J. B. Harrison

FIG. 9. PITAHAYA AND SAGUESO CACTI PROVIDE A RICH HARVEST OF FRUITS IN SUMMER.

[p. 199(A)]

3:Davis & Dawson E-6 (1922-1940) 1945
NU31 Seri NU31

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FIG. 10. SERI BELLE
WEARING A PAINTED DESIGN SUCH AS FORMERLY WAS INDICATIVE OF THE BLOOD LINE OF A GIVEN CLAN.

264 hut, the rotting flesh and cartilage of its noisome interior to be explored and mouthed by the toddling children or gnawed by the cringing coyote-curs attached to the rancheria.

223 At certain seasons or when deemed propitious by the elders of the family, a pelican harvest was planned. Isla Tasne, some fifteen miles from Tiburon Island, is the haunt and breeding ground of the pelican that served not only as a valuable food supply for the Seris, but also as the chief source of apparel. At such seasons temporary rancherias were set up on the shores of Bahia Kino, and when conditions were favorable, or when hunger prompted them, the balsas [302] would be launched in the evening toward Isla Tasne, the women of the party lying prone on the cane bundles and propelling the craft by paddling with their hands or with large hatchet clam shells. Reaching the island after dark, the balsas were left in charge of the women while the men and older boys, armed with clubs, crept up over the slippery, guano-covered rocks to rush on [264] the roosting fowls and slaughter them. The

[p. 179(B)]

3:Davis & Deeson E-5 (1925-1949) 1945
MU31 Sari MU31

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FIG. 11. PAINTING THE FACE
USING A RED PIGMENT OBTAINED FROM THE TUBERS.

223 lice-infested carcasses were then gathered
264 and brought to a central place among the stinking rocks where a gluttonous feast was held in the dark, the long ahungered tribesmen gorging themselves with the soft entrails and succulent parts, and carousing in the carnage until overcome by slumber.

281 The day following the slaughter, the
294 matrons collected the carcasses with least damaged plumage and carefully removed the skins, which were then gnawed and sucked clean of flesh and grease and dried in the sun (Fig. 8). From two or more of these skins they made a kilt or robe (Figs. 1, 2), the principal apparel, not so much for protection from cold as from the scratch and prick of the abounding spines and thorns of Seriland. The skins were sewed with sinew and often held in place on the body by a
283 cord made of human hair (Fig. 1). The
302 culture of their long, luxuriant hair, indeed, was an important matter. They brushed their hair regularly with a brush fashioned

[p.200(A)]

283 from coarse, wiry grass stems, and saved all
302 the brushings to be used in the making of strong threads and cords.

The fleetness of foot and remarkable physi-
147 cal endurance of these people attest to the
481 rigorous and difficult life in Seriland where the ability of an individual to survive a season of want depended upon the reserve energy of his own body by which he could carry himself long distances in search of food and yet have strength to return to a waterhole, left miles behind. The slender, sinewy limbs and capacious chests of the Seris, in whom no trace of obesity has ever been observed, show clearly the result of untold centuries of selection of the strong by the severity of the environment, where water,
[312] too heavy for transport, too difficult of storage, is yet always within reach of an organism strong enough to journey ten, twenty, or even fifty miles in search of it.

Perhaps the most severe physical exercise
224 practiced by the Seris was the chase of animal game, particularly since it was often resorted to only after a period of weakening hunger which prompted the all-out effort to obtain adequate food supply. Days of wandering over the deserts in search of vegetable food were sometimes unrewarded, and although rabbits were to be had for the chase, they were too small to be of much consequence in the feeding of a family. The deer were fairly plentiful and provided excellently for a lasting feast.

The deer hunt was conducted by several tribesmen without weapons. When an animal was sighted it was followed by one and circled by others of the party, chased until frantic and exhausted, whereupon one of the men rushed upon it, threw it to the ground and caved in its skull with a stone.

The most avidly sought prey in the Seri chase were the helpless young and heavily pregnant does which were pursued and rent to fragments with a horrible fury, particularly with intent upon the succulent tidbits afforded by the fetal flesh.

222 A time of ease and plenty came each summer, for usually in late May or June the cactus plants with which Seriland abounds begin to mature their fruits. In the foothills of Sierra Seri on the mainland, great

222 forests of giant cacti (Fig. 9) provide during this season an unlimited supply of "pitahayas" toward which the tribespeople customarily moved to accomplish the annual harvest. The fruits were readily knocked down by means of long poles and, when ripe, the spines were easily brushed off, leaving a luscious pulp as big as a fig. During the height of the season all the clans withdrew from the coast and gave their undivided attention to the collection and consumption of the cactus fruit, gorging tremendous quantities for weeks until waning supply and cloying appetite drove them back to the more severe hunt for turtle and pelican.

252 262 514 Perhaps the only germ of thriftiness in the Seris is shown by a peculiar custom with respect to the pitahayas. The fruits, eaten in such enormous quantity, were imperfectly digested, the hard-coated seeds particularly passing through the body unchanged. Using [415] large seashells, the feces containing these [251] seeds were collected and preserved with some care. Thus, when the harvest of fresh fruits was over, there remained a hoard of these dry, nutritious discharges which were ground on the stone abst, winnowed in a shallow basket and made into a meal to be eaten, either dry, as a watery atole, or mixed with turtle grease to form a thick paste.

614 Although the Seri's omnipresent problems of food-getting and of personal subsistence have been of particular interest, the lost social customs of the tribe deserve a moment's attention. Before the death of all [161] but a few of the 2,000–3,000 Seris at the hands of invading Spaniard and Mexican, the tribe consisted of a number of conspicuous maternal clans, each of which was presided over by a zoic tutelary such as the Pelican, the Turtle, the Rattlesnake, or the Badger. The totemic symbols denoting the 302 various beast-gods and incidentally indicat- 386 ing the blood-carriers of clans dedicated to 614 them, consisted of elaborate designs painted upon the face (Fig. 10). In accord with their savagery in which the social organization was based on blood kinship reckoned in the female line, under ordinary circumstances, the faces only of the females were painted. Colored minerals pounded to powder afforded the pigments for the paint-

[p. 201(A)]

3:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

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[487]
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FIG. 12. SERI MOTHER AND BABE

SERI MOTHERS COMMONLY HAVE TOO MUCH MILK AND FREQUENTLY RELIEVE THEMSELVES BY SUCKLING AN ORPHANED PUPPY OR SOMETIMES EVEN A BABY PIG.

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ing, and were carried in cane tubes. The paints were carefully prepared, applied, and preserved, and, as indispensable feminine accompaniments even on the longest journeys, were among the most highly prized of the people's possessions. The importance of the face-painting custom, established in the old tribal life, remained strong even as the slaughter of the warring tribe progressed

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[p. 201(B)]

3:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

302 614 and the maternal clans disappeared. Today, with the entire tribe numbering no more than 150 persons, the meaning of the painted symbols has become vague and meaningless with respect to the nonexistent clans, yet the custom persists, now largely for personal adornment, and even a male tribesman may sometimes be seen squatting before little dishes of pigments, peering into a ten cent store mirror as he carefully applies the colors (Fig. 11).

649 Had it not been for the Seris' intolerance of aliens they might today constitute a numerous and thriving people, or at least have been absorbed by the polyglot Mexican popu-

[p. 202 (A)]

648 lation, but as the Ishmaelites of America they brought misery and death upon themselves by an unwavering belligerence toward all outsiders. The history of their centuries of bitter contest against the forces of law in Sonora is a bloody one, but whatever has been the extent of their wanton looting and murder, there is one crime of which they have long been unjustly accused. Sonora is
[266] full of legend and tale of "los canibales," but no convincing evidence has ever come to light proving that the Seris ever practiced cannibalism. Of course, it could be argued that the only ones who might have proved it were killed and eaten.

[p. 202(B)]

[pp. 203-260 have no material relating to the Seri.]

2:Davis & Dawson F-5 (1932-1940) 1945
MU31 Seri MU31

THE SAVAGE SERIS OF SONORA—II*

By EDWARD H. DAVIS AND E. YALE DAWSON

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After the Seris' first contact with the invading white man through Coronado's soldiers in 1540, they lived for nearly another century outside the influence of the civilization that was eventually to engulf them. By the early 17th century, however, pearls were discovered in the Gulf and the sailing ships that began to ply the waters introduced the first great innovation into Seri culture. The Indians found on their beaches boards from these ships and, most important, flotsam hoop-iron and nails. One of the great difficulties in constructing arrows and harpoons had been the fashioning of the point. The stone, tooth, or bone points were difficult to make and more difficult to attach securely to the shaft. The more easily worked iron proved a boon to their hunting and fishing, and later made a more satisfactory weapon of war than they had hitherto possessed.

000 The beginning of Seri wars was the year

* Continued from page 202 of preceding issue.

[p. 261(A)]

2:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

THE SAVAGE SERIS OF SONORA—II*

By EDWARD H. DAVIS AND E. YALE DAWSON

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The beginning of Seri wars was the year 1700 during which they first conducted nocturnal raids on some of the most outlying of the Jesuit mission pueblos of Sonora, killing inhabitants with their arrows and stealing the cattle and horses. Year after year, the gradual expansion of Sonoran settlements and their nearer approach to the borders of the Seri homeland aggravated the conditions of conflict. The vigorous proselyting expeditions of the Jesuit missionaries brought about the capture of some hundred women, children, cripples and viellards of the Seris, and concurrently the death of many defending warriors. These expeditions further kindled the hatred of the free Seri against the white man, while the few score "converts" gathered about the several missions gained a shocking character for sloth, filth, thievery, treachery, obstinacy and drunkenness. Raids upon the settlements continued and between 1757 and 1763 4,000 mules, mares and horses were known to have been stolen and eaten.

[p. 261(B)] [text continues on p. 262(A)]

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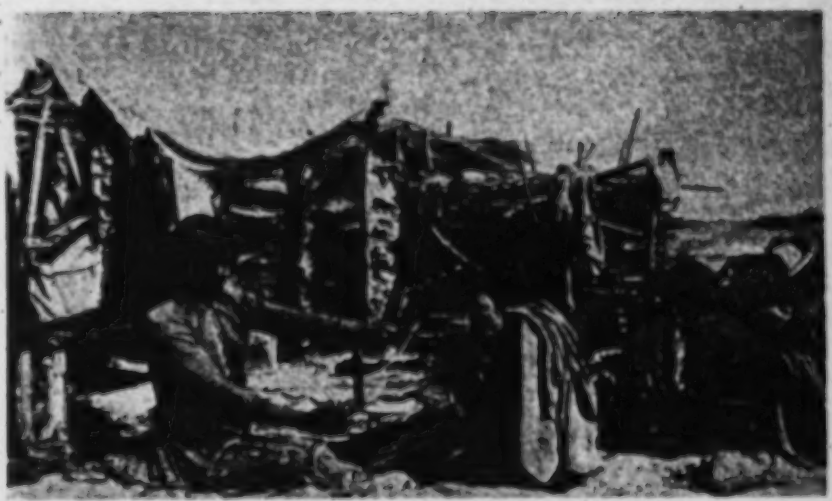

FIG. 13. PREPARING BASKETRY MATERIAL.
THE SPLINTS ARE MADE BY HAND AND MOUTH STRIPPING OF THE BRANCHES OF TOBOSE AND PALO BLANCO.

[p.261(c)]

3:Davis & Dawson F-5 (1927-1940) 1945
MUSI Seri MUSI

[291]

FIG. 14. JUAN TOMAS AND NEPHEW
OLD SERI CHIEF BEFORE CHICO ROMERO AND VETERAN OF MANY WARS, IN 1936 AT THE AGE OF 94 YEARS.

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The further extension of settlements necessitated the establishment of military posts from which troops were sent out, first by one, then another governor of Sonora, to destroy all Seris they might find and to discourage their wanton looting and killing. If a strong force was sent out, it was frequently ambushed and many soldiers were left on the field, transfixed by arrows. Many small forces left never to be heard from again. In 1780 an army of national troops met the Seris in several bloody battles in their Cerro Prieto, and claimed to have exterminated the tribe. Yet the Indians retained sufficient vitality to continue their sanguinary raids

[p. 262 (A)]

648 726 on the settlements of Sonora. Many expeditions, fitted out at great expense, were sent against them, but in that barren land, destitute of water, the military parties suffered greatly in their campaigns, and succeeded little in their efforts to conquer the wary natives.

177 648 By 1850 probably every Seri between infancy and decrepitude had seen the proprietor and other inhabitants of the rancho of Don Pascual Encinas at Costa Rica where the Seris were abnormally tolerated and even encouraged to make themselves useful and unobjectionable. They yielded to indolent scavengering more than ever before; they substituted cast-off rags and barter-bought cotton cloth for their pelican robes and other primitive garments. They ate cooked food when it fell their way; half heartedly they adopted metal cutting implements and sought or stole nails and hoop-iron for arrow [191] points. Some acquired a smattering of Spanish and many came to sport Spanish names. Never, however, did more than one or two Seris come to live in a house, nor even to encompass the idea of making adobe. They had not learned to ride horses nor to burden them, but only to use them for immediate slaughter and consumption. They were acquainted with firearms, but it was not until years later that they learned to use them. In and about Rancho Costa Rica the Seris and the Mexicans lived for a time in mutual tolerance, certain depredations being allowed the Indians just as were the rodents of the rancheria.

648 721 When, in 1855, Don Pascual Encinas experienced the loss of unusually large numbers of stock from Seri raids, he was aroused into announcing that a Seri head would be taken for each head of stock stolen. For a while the Indians seemed to acquiesce, but within a few days a group of Seri women "milled" a band of horses, caught and threw one so that its neck was broken, whereupon [252] they immediately sucked its blood, gorged on its intestines, and buried its quarters to "ripen" according to their custom. The vaqueros of the settlement were instructed to shoot the first Seri seen on the llano. Within two days the tribe was on the warpath and the war raged for a decade.

[p.262(B)]

3:Davis & Dawson I-5 (1923-1940) 1945
MUSI Sari MUSI

648 726 [161] The Encinas war reduced the tribe to some 350 people, and temporarily discouraged their bloodthirsty raids. By 1893, however, new killings were being reported. In one instance the Seri Chief, Juan Tomas (Fig. 14), watched as the men of a large rancho left for a rodeo and then, worming up through the brush, led his warriors into the buildings and with clubs and arrows massacred every woman and child within. Two Yaqui women who had managed to escape into the brush watched as the warriors seized [727] the infants by their feet and dashed their brains out against a large rock near the corral.

In 1904 a number of wilder Seri, led by several Yaquis, went on the warpath and killed every soul in a Papago village. The war with the Papagos that ensued aroused the Governor of Sonora into action. Nearly 250 armed men were sent out to kill or capture the Yaqui leaders and to administer a severe lesson to the Seris. The desert water holes were all placed under guard until the Seri chief, Juan Tomas, was forced to surrender for his thirsting tribesmen. Peace was conditional on the delivery of the Yaqui leaders with their hands tied together. Two days later a couple of gaunt, wild-looking Seri women, clothed in rags and with painted faces, walked into the camp to keep the conditions of the peace as they had understood them. They carried a palanca between them from which were suspended bundles of severed hands of the Yaquis who had been clubbed to death as they slept.

114 648 Twenty years after the delivery of the Yaqui hands (1922) the senior author, under arrangement with the Museum of the American Indian in New York, carried out his first expedition into the heart of Seriland. Although still intolerant of aliens and at times dangerous if aggravated, their depredations had been reduced to the occasional killing of a stray cow. The Seris had come to live a comparatively peaceful life under the supervision of Roberto Thomson of Hermosillo. It was through his efforts that the Seris were saved from complete extermination by the vaqueros of Sonora, and after having treated them for many years as a friend and adviser, he had made it feasible for a visitor to enter

[p.263(A)]

S.Davis & Thomson E-5 (1922-1940) 1945
NUSI Seri NUSI

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their midst and to live among them without undue fear of losing his life. Through the kindness of Señor Thomson the senior author succeeded in making himself a friend of the Seri and, enlarging upon this friendship through long periods of living and traveling among them, has acquired an intimate knowledge of these strange people.

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In 1923 the fishing industry of the Gulf of California was not yet well developed, and it was to be ten years before the village of Kino should appear on the maps of the Sonora coast. The Seris were still isolated in their desert domain and their numbers, then about

[161]

250, were maintaining themselves out of reach of the infectious diseases of the white man. The clan life had disappeared, and the people lived as a single tribe with their old chief, Juan Tomas, 90 years old at that time

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[482]
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FIG. 15. MOVING DAY AMONG THE SERIS
THESE BURDENS, BORNE FOR MANY MILES OVER ROCKS, THROUGH CACTUS AND DEEP SAND, CONTAIN UTENSILS FOR HOUSEKEEPING WHEREVER THE SERIS MAY STOP.

[p.263(B)]

3:Davis & Dawson E-5 (1923-1940) 1945
MU31 Sect MU31

105 178 and a veteran of nearly a century of warfare against the soldiers of Sonora. The turtle remained their most important source of food, and the pitahaya harvest the most enjoyed. The crafts of their old culture were largely gone, however. Hoop-iron had come in for many uses: harpoon points, scrapers, and knives. The bow and arrow had been almost entirely supplanted by rifles of which the tribe possessed more than thirty. The handmade olla was fast disappearing in favor of the five-gallon tin can, and water carrying, now much done by the males, was [482] accomplished by means of a palanca, borne on the heavily calloused shoulder, to which a can was suspended from each end.

It seemed that the balsa building art was 178 encountered barely as it passed into extinction, for the last balsa known to have been 396 made by the Seris was found in use near [126] Kino, in 1922. This rare prize was immediately bargained for and in exchange it was agreed that the tribesman should have lumber to build a boat large enough for all the people of his family. A few months later the finished craft, caulked with a "pitch" made

[p. 264 (A)]

178 of sea lion oil and powdered cactus skeleton,
396 was launched. It was the largest craft they had ever possessed and came to be called the "battleship," for its size.

114 After having established firm friendship with the tribe in 1922, it was possible two
221 years later to carry out an extensive plan to learn the habits of the Seris by living among them, sharing their comradeship along with their privations. At this time they still had no homes that could even be called semi-permanent. Moving here and there in response to fluctuations of their precarious food supply, household things were not accumulated, and life continued to be reduced to its very simplest elements and absolute necessities. Baskets made of fiber from the torote tree, some tin cooking and water ves-
[415] sels (the handmade olla was seldom any longer made), some patched and filthy rags which served as blankets to the fortunate few, constituted the family possessions (Fig. 15). Starved, bony family dogs were abun-
231 dant, as always, every Indian having one or two (Fig. 16). Each day they could be seen gnawing on some old fish head long since

[p. 264 (B)]
[Text continues on p. 265 (N)]

3: Davis & Dawson E-5 (1922-1940)1945 NU31 Seri NU31

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FIG. 16. FAMILY DOGS ARE OFTEN MORE NUMEROUS THAN THE PEOPLE
HERE A GROUP OF SEVEN SERIS IN THE VILLAGE NEAR KINO KEEPS TEN OR MORE OF THE MEXICAN CANINES.

[p. 264(C)]

3:Davis & Dawson 2-6 (1923-1944) 1945
MNH Seri MNH

[342]
[415]
[732]

FIG. 17. SERI BLIND MAN
BEING LED BY A BOY. BOTH THE CRUDE SHELTER OF POLES AND BRUSH SERVING AS AN ART DWELLING.

231 destitute of nourishment, tough and strong as rawhide; but hope springs eternal in an Indian dog's stomach, and again and again he will search out and mouth the same old pelican bone or fish head, discouraged never. The dogs, beside keeping the camp clean, lick all the cooking utensils when they are not tended, and also are allowed to lick clean the infants after they have performed their natural defecations. A Seri girl was seen placing [312] a small can of water for a dog to drink from, afterward drinking some of the remainder herself and then pouring the rest back into the family five-gallon can.

732 Although the conditions of existence for
734 the Seris had from time immemorial been too precarious to permit of anyone living who was unable by physical disability to hunt or fish to get his meat, there were two or three men, blind or nearly so, whose wives got an uncertain living for them by the hardest struggle (Fig. 17). If a Seri, however, became ill of a disease which the tribe feared, he was often taken into the desert and left with a little food and water, either to get well and return or to perish.

[P. 265(A)]

3:Devb & Desmm I-5 (1922-1940) 1945
MUH Seri MUH

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[161]

Sea turtle was still the staple meat, and with better boats and improved tools and tackle borrowed from the Mexicans, the living was becoming considerably less harsh along the shores. They then had nine boats for some two hundred people. One good boat could secure a living for five families, and they had well improved this minimum standard of living.

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The origin of the use of fire among the Seri's is unknown, but they have their own story of it. One day Chico Romero, present chief of the Seris (Fig. 19), made a fire drill out of a piece of dry driftwood and showed how to make a fire by turning the stick between the hands. In three or four minutes the fine dust became a glowing punk which, with the aid of some dry grass and the wind, was quickly fanned into a flame. He was then induced to tell the legend. He looked about and pointed to a little green and blue-bodied fly and said: "The gods sent this fly down from the sky to show us how to make fire. Notice when it lands. Did you not see

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[535]

FIG. 18. THE NATIVE DANCE
IS DONE ON TOP OF A TURTLE SHELL TO THE BEAT OF A BOW STRING BEING STRUCK WHILE THE BOW IS HELD AGAINST TWO INVERTED BASKETS ON SAND.

[p. 265 (B)]

3:Davis & Dawson E-6 (1922-1940) 1945
NUXI Seri NUXI

372 it take its two hands, rub them over its head
and then rub them together a few times?
773 The Indians noticed this and in this way we were taught by this little fly how to make fire by rubbing a stick back and forth between our two hands."

773 In response to comments about the nocturnal howling of the coyote, Chico told another interesting tribal legend. "A long time ago all Seris were birds or animals. The badger had charge of the saints or gods, which were little images carried in a pouch and hung around his neck by black strings.

[142]
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[643] FIG. 19. CHICO ROMERO
WHO SUCCEEDED OLD JUAN TOMAS AS CHIEF OF SERIS.

Coyote got to quarreling with badger and, watching his chance, grabbed the bag, tore it loose and ran off with it, giving his derisive laugh as he ran, and ever since coyote has been laughing at badger and all others.

[p.266(A)]

773 Before this it was day all the time, but then it became night and coyote only laughs at night. The black strings still hang about badger's neck."

It is strange to find, too, that a flood legend is traditional among the Seris. Chico said: "In the times of the ancients a great flood came, the ocean rose up and all the country of the Seris was under water except the top of Cerro Alto. There a few Seris gathered and were saved. Everyone else was drowned. To this day the top of Cerro Alto is covered with brush which the flood did not submerge. All Seri children are taught this flood tradition, and they must learn it by heart so as to teach their children and their grandchildren."

764 The death of a tribesman gives no cause for ceremony among the Seris, although the [763] nearest relatives may customarily wail, sometimes for months, morning and evening. The disposal of the bodies of the dead, is, however, of considerable interest. A hole about [412] three feet deep is dug by means of large clam shells and a cave is excavated for the head such that the earth will not touch it. The deceased Indian is wrapped in his own blanket and laid in the grave with the head to the East, face up. The body is covered and the grave is partly filled with earth, then covered with a layer of the spiniest of chollas and thorny brush, further filled, leveled and covered with another layer of chollas to discourage the coyotes from digging up the body. When the Seris are on the move, how- [766] ever, and grave-digging is too great a task, a body may simply be lifted high to the fork of a giant cactus and left there.

583 Marriage among the Seris is not so much 585 a ceremony as it is the completion of a bargain. Under ordinary circumstances, when a man buys a woman he strikes a bargain with the bride's parents and makes a down payment. Only after completion of the bargain does the woman go to live with the man, but even then payments do not cease but continue intermittently through life. Chico Romero, although "married" for fifteen years, gave his wife's father some paint that he had received in payment for guiding and 425 packing. It is also considered natural to 858 buy and sell children. One Seri, Santo

[p. 266 (B)]
[Text continues on p. 267 (B)]

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FIG. 20. SERI WOMEN BEARING FIRE WOOD TO THE CAMP AT KINO

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FIG. 21. A MEXICAN TOTUAVA CATCH ON THE BEACH AT KINO

[p.267(A)]

S:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

425 Blanco, whose son was only sixteen years
458 old, bought outright for him a little girl of
six years.

When contracts for fish were secured by
621 the Mexicans from American markets in

[p.267(B)]

S:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

621 about 1922–3, the exploitation of the teeming waters of the Gulf was rapid, and the village of Kino suddenly appeared on the bay by that name where there had been nothing but Seri jacals before. Today there

[p. 267(C)]

[font continues on p. 268(B)]

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FIG. 22. SOME SERI WOMEN OF THE VILLAGE NEAR KINO

[p. 268(A)]

S.Davis & Dawson E-5 (1922-1946) 1945
NU31 Seri NU31

621 are four or five hundred people there, more during the peak of the season, and some fifty or more wattle and daub shacks arranged without plan or order, facing at every angle, but all near the beach on which the fishing boats land and are pulled up on shore. Refrigerated trucks carry fifteen to twenty-five tons of fish away daily during the height of the season, mostly the huge endemic totuava (Fig. 21). These great fish are dragged from the boats and lined up on the shore, where the heads are chopped off and the entrails are pulled out and left to be carried away by the tides or consumed by hundreds of scavenger gulls of the beach. A quarter mile [131] north of Kino is the present-day Seri village where nearly all the Seris now live semi-permanently because of the easy money and [439] living. They have their own boats, fish a [262] little for profit, and also bake the discarded fish heads for food. The Seri dwellings are 342 now scarcely inferior to many of the wattle and daub shacks of the Mexicans. Indeed, [439] many of the Mexican shacks are built by Seris in exchange for manta cloth or food.

[p. 268(B)]

3:Davis & Dawson E-5 (1922-1940) 1945
NU31 Seri NU31

342 They are mostly of ocotillo sticks and mesquite branches stood up in the sand, lashed together, and plastered with mud for protection from the wind, but not from the rain (Fig. 22). When the fishing season ends
221 about Holy Week, they all move away to the turtle grounds on Tiburon Island, where they also hunt deer. Then in June and July they go into the desert hills to reap the harvest of cactus fruit, retiring to the lowlands thereafter to harvest the mesquite beans and to await the recurrence of the big fish. In and about Kino they are reasonably well fed and clothed, and were it not for their susceptibility to disease they would be as well-
164 off as many of the Mexicans. Influenza
161 strikes them heavily, however, and pneumonia is common, usually fatal. Their numbers dwindle and their extinction is in sight, yet for a little while these strange people will continue to tread the rocks and thorns of their desert land, a handful of Nature's primitive creatures, through whose veins flows the blood of thoroughbred American aborigines.

[p.268(c)]